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BY COURIER

July 12, 2019

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
Suite 2700, 2300 Yonge Street
P.O. Box 2319
Toronto, ON M4P 1E4

Dear Ms. Walli:

EB-2019-0120 - Hydro One Networks Inc., Application for Approval of the Allocation of Construction Costs of the Supply to Essex County Transmission Reinforcement Project - Reply Submission

Please find attached Hydro One Networks Inc.'s (Hydro One) reply submission in accordance with Procedural Order No. 1 dated May 24, 2019.

An electronic copy of this has been filed through the Ontario Energy Board's Regulatory Electronic Submission System (RESS).

Sincerely,

ORIGINAL SIGNED BY JOANNE RICHARDSON

Joanne Richardson

EB-2019-0120
APPLICATION FOR APPROVAL OF ATTRIBUTION OF COST RESPECTING
CONSTRUCTION OF SUPPLY
TO ESSEX COUNTY TRANSMISSION REINFORCEMENT (“SECTR”)

HYDRO ONE NETWORKS INC.
REPLY SUBMISSION

INTRODUCTION

Hydro One’s Feb. 28, 2019 Application focused on Hydro One’s obligation pursuant to TSC sections 6.3.18 and 6.3.18A – a request for approval of the attribution of costs between the triggering customer (Hydro One Distribution) and the Transmission network pool. Interveners and Hydro One are in agreement on this issue. However during the proceeding, Board Staff and a number of interveners expressed concerns about what they viewed as Hydro One’s lack of response to interrogatories on the apportionment of costs to “downstream” distribution beneficiaries.

Addressing the SECTR cost allocation issue has been a very protracted process and of course, Hydro One agrees that distribution beneficiaries need to be informed of any potential financial obligations. Accordingly, to be helpful, Section 3.0 below provides relatively small capital contribution amounts expected from downstream beneficiaries as a result of the proposed allocation of \$43.8 M of SECTR project costs to Hydro One Distribution. Also, attached to this submission is a comprehensive response to SEC’s Interrogatory #2 (Exhibit I-03-02), which is also intended to address other interveners’ interrogatories on this issue. This submission itself will address comments by Board staff and interveners on both the main subject of this Application and those respecting the downstream allocation of costs.

1.0 PROPORTIONATE COST APPROACH, USE OF MOST CURRENT INFORMATION

Hydro One notes that all interveners have generally accepted the use of the proportionate cost approach as a proxy for proportionate benefits. Hydro One agrees with OEB staff that the updated cost estimates should now form the basis of the actual cost allocation, rather than the amounts initially included in Hydro One’s application. Hydro One agrees with SEC and LPMA that the most up-to-date information available should be used, including the updated project costs of \$57.5M, for the purposes of determining the allocation between the network and the triggering

transmission customer. Hydro One therefore proposes to allocate 76.1% of the SECTR project cost to the triggering load customer (Hydro One Distribution).

2.0 APPLICABILITY OF CODE COST ALLOCATION AMENDMENTS TO SECTR

Entegrus stated its understanding that, because the cost allocation requirements in the TSC and DSC became effective after the SECTR assets came into service, those requirements would not apply to this project. Hydro One has had a different understanding, informed by the Board's Aug. 23, 2018 "Notice of Revised Proposal to Amend a Code" (p. 30), which states the following:

"The OEB's intent is that the Code amendments would only apply on a prospective basis, as existing agreements were entered into based on the current rules in the Codes, *with the exception of allocating the costs associated with the SECTR project which triggered this consultation* [Italics inserted by Hydro One]. As the OEB noted in its Phase 1 Decision and Order related to that leave to construct case, "a deferral account should be established to facilitate the allocation of project costs as later determined".¹⁰

¹⁰ Decision and Order on Phase 1, EB-2013-0421, Hydro One Networks Inc., Leave to construct a new transmission line and facilities in the Windsor-Essex Region, July 16, 2016, page 10 (emphasis added)."

Hydro One had established the deferral account ("SECTRDA") as directed by the Board, and the purpose of this Application is to obtain the Board's approval of the disposition of the funds currently held within it, through the allocation of SECTR costs in compliance with the Board's revised Code requirements.

3.0 ANTICIPATED CAPITAL CONTRIBUTIONS

Based on \$43.8M in SECTR project costs attributed to Hydro One Distribution, the capital contributions expected to be required from distribution beneficiaries are summarized below:

Anticipated Capital Contributions
(in \$ Millions, excluding HST)

Customer	TOTAL
Hydro One Distribution Load Excluding Customers \geq 5 MW & Embedded Distributors (i.e., "Hydro One Distribution Load")	0.6
Customers \geq 5 MW (Consistent Monthly Peaks)	-
Customers \geq 5 MW (Fluctuating Monthly Peaks)	3.6
Essex Powerlines ¹	-
E.L.K. ¹	-
Entegrus ¹	-
TOTAL	4.2

¹ Essex Powerlines' capital contribution for Transformation is forecast to be \$8,600; Entegrus is \$35,000; E.L.K. is \$nil.

4.0 ALLOCATION OF TRANSMISSION COSTS TO TRANSMISSION AND DISTRIBUTION BENEFICIARIES AT THE SAME TIME

Hydro One strongly agrees with Board staff that a two-step process must be avoided and that the transmitter must allocate transmission costs to all beneficiaries at the same time, using a consistent methodology and assumptions. The attached interrogatory response provides more details on Hydro One's approach to this.

Hydro One also agrees with Board staff that the only amount needing the Board's formal approval in this Application is the allocation of costs between the network pool and the triggering customer. For this reason, Hydro One understood that this hearing was confined to that determination. Board staff's submission, however, also suggests that the Board's and downstream beneficiaries' consideration of the allocation of costs between the transmission networks pool and the triggering customer could be affected by their knowledge of whether they must make a capital contribution. The Board also seems to suggest that Hydro One should use the formal proceeding to communicate with these beneficiaries on potential capital contributions.

Hydro One has a slightly different interpretation, which separates the TSC requirement for formal approval of the cost allocation between transmission network and triggering customer from what it considers the subsequent contractual process, during which discussions with customers can take place. Hydro One submits that the actual allocation, from a practical and

contractual basis, can begin only *after* the Board's approval of the cost attribution to the triggering customer, because that approval indicates not only confidence in the application of the TSC methodology, but also assurance that the project costs are correct and sufficiently stable for determining all capital contributions for use in subsequent contractual commitments. Hydro One understands that individual downstream beneficiaries would have preferred to have had earlier discussions with Hydro One on their potential financial obligations. Hydro One agrees that would have been ideal. However, the value of calculating and discussing potential capital contributions with downstream beneficiaries before Hydro One Distribution has received an approved project cost estimate is questionable, as underlying uncertainties would still exist.

5.0 SUGGESTED PROCESS ADDITIONS TO LEAVE TO CONSTRUCT PROCEEDINGS

SEC proposes an upfront approval of downstream contributions during the leave to construct proceeding, to avoid regulatory duplication and inconsistent Board decision-making on different distributors' subsequent rates applications.

In the context of a Leave to Construct ("LTC") approval, Hydro One submits that such an approach would not be helpful, and in fact may be misleading. The construction of transmission lines is an extensive process that occurs over multiple years with the LTC approval being sought prior to construction commencement. Generally the project in-service date is three to five years or longer into the future. In that time period, a number of factors (for instance, the final project costs, in-service date, the number, size of the various beneficiaries, the load forecast, etc.) can and will change, making any pre-determined allocation of costs irrelevant. These factors may result in a post-construction capital contribution which significantly differs from what would have been approved earlier in the LTC.

The Board's determination of the impact of capital contributions on distributor customer rates is something that the Board has historically dealt with in a rates application. This situation existed prior to these code amendments and has not appeared, to Hydro One's knowledge, to have been an issue. Regulatory instruments such as variance accounts are already available to future Board panels to address any variations in the necessary capital contributions required from distributors. Overall, Hydro One submits that this issue has been dealt with, as over the years, transmission-connected distributors have shared the cost of transmission infrastructure and obtained approvals of the required capital contributions in their individual rates submissions as necessary, without concern over inconsistent decision-making.

SEC also proposes that future LTC proceedings should require evidence from not only the IESO and transmitter, but also the triggering customer (if a distributor), with the distributor's assessment of the project's benefits.

To address this concern, Hydro One reminds SEC that it is not uncommon that construction of transmission lines subject to LTC approval is the outcome of a regional infrastructure plan or integrated regional resource plan, during the preparation of which, distributors would have participated or, in the alternative, would have been consulted, in preparation for the LTC application. It is also common for Hydro One to file letters of support from beneficiaries – typically large customers and/or distributors – to support the need for the project in its LTC application. Lastly, potentially impacted distributors are provided an opportunity to intervene in any LTC application through the OEB's letter of direction prior to the commencement of LTC hearing. Accordingly, Hydro One submits that this is not an issue, is beyond the scope of the assessment of costs in this specific case and is more a policy/handbook issue that can be, and likely better is explored, in any review of Chapter 4 of the Ontario Energy Board's *Filing Requirements For Electricity Transmission Applications*.

For the reasons given above, Hydro One submits that SEC's proposals for upfront approval of downstream capital contributions in LTC applications and a new requirement for distributor evidence attesting to the benefits of the transmission investment should be dismissed.

6.0 MITIGATION OF RATE IMPACTS

Entegrus raised the issue of options to mitigate possible rate impacts of capital contributions. Hydro One notes that TSC Section 6.3.19 enables the provision of transmission capital contributions in equal installments over a five-year period, or possibly longer, if approved by the Board.

CONCLUSIONS

Hydro One submits that the information provided in this proceeding is sufficient for the Board's approval of the proposed allocation of 76.1% of the updated SECTR project costs of \$57.5M to the triggering customer. This approval would enable Hydro One to finalize its calculations and move into discussions with each beneficiary as described in the attached Interrogatory response.

Hydro One appreciates the parties' desire to review the distribution cost allocation during this proceeding, from the perspective that the SECTR project is the first case in which costs for a transmission investment will be allocated to distribution customers. Therefore, questions on the

process are understandable, but some time could have been scheduled during the policy consultation for participants to have these addressed. Hydro One also wanted the Board and interveners to understand the reasons for its reluctance to provide details of a downstream cost allocation when the first allocation between transmitter and the triggering customer has not yet been approved. That said, Hydro One has now provided as much information as possible, in an effort to advance the process, given the more than five years since this Application was first made and all parties' need for resolution.

In conclusion, Hydro One submits that it should now be allowed to allocate 76.1% of the SECTR costs to Hydro One Distribution and also that it has clearly expressed its intent respecting the allocation of those costs to downstream beneficiaries.

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SEC INTERROGATORY # 2
(REVISED)

Reference:

N/A

Interrogatory:

Hydro One proposed to allocate 72.6% costs to the triggering load customer, Hydro One Distribution:

- a) Does Hydro One Distribution expect to allocate any of those costs to any of its embedded distributors or large users by way of a required a capital contribution?
- b) If the answer to part (a) is yes, please provide details of who will be impacted, the expected amount allocated to them, and the supporting calculations, regarding those amounts. (Note: SEC would expect to see information similar to what was provided in EB-2014-0421, Exhibit I-P2-2-9 Attachment 1).
- c) If any capital contributions will be required, please provide the specific provisions of the DSC which authorize Hydro One Distribution to require such a capital contribution.
- d) If any capital contributions will be required, does Hydro One envision the Board ever approving the allocation in a proceeding? Please explain your answer.
- e) If any capital contribution will be required, please explain how the allocation differs from what was proposed in Phase 2 of EB-2014-0421.

Response:

a) Hydro One Distribution, in accordance with the DSC Section 3.6.1, requested Hydro One Transmission to calculate any needed capital contributions for distribution beneficiaries of the SECTR investment. At this time, Hydro One Distribution, two embedded distributors and a few large (≥ 5 MW) customers are expected to make capital contributions. (Hydro One did not receive connection requests from the embedded distributors on behalf of large customers in their service territories, but will manage any requests in exactly the same manner as those in its service territory).

- 1 b) Based on \$43.8 M in costs attributed to Hydro One Distribution, the current shares of
 2 project costs and capital contributions expected to be required from the distribution
 3 (“downstream”) beneficiaries are summarized in the tables below:
 4

Table 1.0 Allocation of Downstream SECTR Project Costs (in \$ Millions, excluding HST)

Customer	Transformation Pool	Line Pool	Network Pool	TOTAL
Hydro One Distribution Load Excl. Customers \geq 5 MW & Embedded Distributors (“Hydro One Distribution Load”)	0.6	0.5	0.0	1.1
Customers \geq 5 MW (with Consistent Monthly Peaks) ¹	14.3	13.2	0.0	27.5
Customers \geq 5 MW (with Fluctuating Monthly Peaks)	7.0	6.5	0.0	13.5
Essex Powerlines	0.4	0.1	0.0	0.5
E.L.K.	0.7	0.2	0.0	0.9
Entegrus	0.1	0.0	0.0	0.2
TOTAL	23.1	20.6²	0.1³	43.8¹

Table 2.0 Anticipated Capital Contributions (in \$ Millions, excluding HST)

Customer	Transformation Pool	Line Pool	Network Pool	TOTAL
Hydro One Distribution Load Excl. Customers \geq 5 MW & Embedded Distributors (“Hydro One Distribution Load”)	0.6	0.0	-	0.6
Customers \geq 5 MW (with Consistent Monthly Peaks)	-	-	-	-
Customers \geq 5 MW (with Fluctuating Monthly Peaks)	2.5	1.1	-	3.6
Essex Powerlines	0.0 ⁴	-	-	-
E.L.K.	-	-	-	-
Entegrus	0.0 ⁴	-	-	-
TOTAL	3.1	1.1	-	4.2

¹ Please refer to section 2ii), page 4 of this Interrogatory for an explanation of the large customer grouping.
² Does not add due to rounding.
³ A small portion of assets (about \$100k) have been designated incremental Network facilities. Please see section vi) in this Interrogatory for a further explanation.
⁴ Essex Powerlines’ capital contribution for Transformation is forecast to be \$8,600; Entegrus is \$35,000.

1 Please see Appendix 1 to this Interrogatory for the supporting load forecasts and
2 detailed calculations.

3
4 ***1) Difference in Methodology vs That Proposed as Part of EB-2013-0421***

5
6 The methodology for this allocation differs from Hydro One's proposal described in
7 Phase 2 of EB-2013-0421⁵. At that time, Hydro One proposed first calculating the
8 capital contribution required from Hydro One Distribution to Transmission and then
9 allocating that capital contribution between all beneficiaries.

10
11 Today, such calculations will be performed according to the requirements of the
12 recently revised TSC and DSC. More specifically, each beneficiary (whether host or
13 embedded distributor, or distribution load customer) is treated as if they are directly
14 connected to the transmission system. This means that once the portion of the total
15 project cost attributable to the 'triggering customer' (in this case, Hydro One
16 Distribution) is approved by the Board Hydro One Transmission will directly allocate
17 incremental capacity to, and performs an individual economic evaluation for, each
18 beneficiary, based upon the original Initial Economic Evaluation performed in 2016
19 when the station construction was initiated (thereby utilizing 2016 inputs, with the
20 exception of load, which is updated). The value of this overall methodology change
21 is that each participant becomes accountable solely for their performance against their
22 load forecast in future true-ups in accordance with Section 6.5 of the TSC.

23
24 This methodology change, as well as several project-specific updates, created a
25 number of differences from the original calculations.

26
27 ***2) Project-Specific Updates***

28
29 i) *Risk Profiles* – The load forecast for ST customers in Hydro One's original
30 proposal utilized Hydro One's distribution low risk profile to perform a 25-year
31 economic evaluation.

32
33 For today's analysis, the TSC medium-high risk profile (10 years) was utilized
34 and, in this case, individual large customer load has been aggregated to protect
35 customer confidentiality. Due to the exceptional load growth in the area,

⁵ All mentions of the "previous" proceeding or results refer to EB-2013-0421, Phase 2 and the specific Exhibit I-P2-2-9 (and its Attachment 1).

1 Leamington #1 station capacity is expected to be fully utilized by year-end 2019.
2 This factor, combined with the load aggregation for this specific presentation
3 results in a forecast capital contribution which is *generally* zero for large
4 customers. However, *actual capital contributions may differ* depending upon the
5 effects of individual customers' risk profiles and actual load growth versus
6 forecast load growth when subsequently assessed according to the economic
7 evaluation process in of the TSC's Section 6.5 (i.e., this could result in a
8 requiring a capital contribution).

9

10 ii) *Varying Demand Characteristics of Large Load Customers* – Based on Hydro
11 One's experience and discussions with the customers applying to connect at the
12 time of the application, the load forecast for ST customers in Hydro One's
13 original proposal reflected a uniform group with a consistent monthly average
14 peak. This therefore, warranted a Peak Load Index⁶ or "PLI" adjustment of
15 100%. These customers have consistent peaks throughout the year; summer-time
16 load is dominated by air conditioning compressor-type load and replaced in
17 winter with load due to electric grow lights. Today, the forecast for the majority
18 of new large customers continues to support the utilization of a PLI of 100%. In
19 Tables 1.0 and 2.0, page 2 of this response, this group is called Customers ≥ 5 MW
20 with Consistent Monthly Peaks.

21 However, about one-third of new large customers possess demand characteristics
22 that support a different forecast of the monthly peak. In Tables 1.0 and 2.0, page
23 2 of this response, this group is called Customers ≥ 5 MW with Fluctuating
24 Monthly Peaks. These customers require significantly greater system capacity in
25 the winter for electric grow lights than in the summer for air conditioning.
26 Therefore these customers' forecasts support a PLI of 0.68. Since these
27 customers still require the capacity to meet their demand from operations in the
28 winter, but the incremental revenues are significantly less in the summer, they are
29 now forecast as required to pay a capital contribution. This capital contribution
30 may be higher or lower than the average calculated provided in this response,
31 dependent upon the customers' demand forecast based upon their unique
32 operations and their individual risk profile as required by the TSC.

33

34 iii) *Hydro One's Distribution Load Forecast* – Hydro One's distribution load forecast
35 for Leamington #1 is lower than the initial 2013 forecast for several reasons.

⁶ Peak Load Index converts an annual peak into 12 monthly peaks and provides the average peak in a month used for transmission revenue calculations.

1 To support load growth in the area, another transformation station (Leamington
2 #2) is under construction and expected to be placed in-service in late 2019, and a
3 third station is at the early planning stage. All three stations are expected to be
4 served by the same 230 kV line which is now in service. Due to system planning
5 needs, some of Hydro One Distribution's load is now expected to be serviced
6 from the second station. This lowers the transformation pool load forecast for
7 Leamington #1 but that load will be included in the Leamington #2 initial
8 economic evaluation and CCRA, in accordance with the TSC. The capacity freed
9 at Leamington #1 by this transfer and the related incremental costs have already
10 been fully allocated to large customers who have contracted for that freed
11 capacity.

12
13 Furthermore, the original load forecast included some new customers expected to
14 be General Service customers greater than 50kW. As a number of these
15 customers have increased their investment and facilities, their individual size has
16 exceeded the 5 MW threshold for large customers benefitting from this
17 investment. Accordingly their load has been removed from Hydro One's forecast
18 and transferred into that for the large customer group.

19
20 iv) *Load Growth Impact on Line Pool Capital Contribution* – The number of large
21 load customers connecting to the system and benefitting from the SECTR
22 investment has radically changed from that presented in the previous proceeding,
23 resulting in a sharp increase in the load forecast since then. Previously, the load
24 forecast was 37 MW of incremental growth in 2019, rising to 60.7 MW in 2042.
25 Today's forecast now acknowledges that all 180 MW of station capacity in
26 Leamington #1 will be fully utilized by the end of this year. The SECTR
27 transmission line (now in service) is forecast to serve over 425 MW of load by
28 2023 (but this capability is currently limited by the transformation capacity of
29 Leamington #1 and #2).

30
31 As a result of these changes in the load forecast, the required Line pool capital
32 contribution has been reduced by over 90% from the original calculation.

33
34 There is the potential that the forecast may be higher than 425 MW, depending on
35 the expected utilization at the third station currently in the early planning stages.
36 In that case, Hydro One will follow its standard process, utilizing appropriate
37 mechanisms to allocate the appropriate line pool costs from the SECTR

1 investment to those beneficiaries. This may trigger refunds to the SECTR
2 beneficiaries who paid a capital contribution.

3

4 v) *Ratio of Embedded Distributor Capacity vs Large Customer Capacity* – the cost
5 allocated to each of the three embedded distributors has been greatly reduced vis-
6 à-vis that estimated during the EB-2013-0421 proceeding. The reason is that due
7 to the much larger forecast increase in total distribution load, the distributors’
8 capacity as a percentage of the total, versus that of large load customers, is much
9 smaller than that in the previous forecast.

10

11 The last forecast update by any of the embedded distributors to Hydro One was
12 provided in 2017. Essex Powerlines reduced their forecast (and therefore, their
13 required capacity) since the previous proceeding. E.L.K. and Entegrus have
14 maintained their original forecasts. The capital contributions from Essex
15 Powerlines, Entegrus and nearly all of that from Hydro One Distribution are
16 based on the economic evaluation of their share of incremental capacity
17 comprising the overload at Kingsville TS. According to the TSC Section 11.2.8,
18 station overload must be avoided and accordingly investments addressing these
19 are subject to the Board’s “beneficiary pays” principle.

20

21 vi) *Small Costs Associated with Network Assets* – Upon review, a small portion of
22 assets have been designated incremental Network facilities, resulting in the
23 allocation of about \$140k to that rate pool. Due to the fact that the incremental
24 capital and OM&A associated with these assets is expected to be fully paid in the
25 first year after Leamington #1 has been connected, Hydro One proposes that these
26 costs be excluded from future CCRA contracts.

27

28 vii) *True-ups* – Although not a change since the previous proceeding, the question has
29 arisen whether distribution beneficiaries’ economic evaluations would be subject
30 to true-ups as required by the TSC, and if so, could a description of the process be
31 provided. It is appropriate to address that question here.

32

33 Hydro One will perform economic evaluation true-ups on any capital
34 contributions collected from beneficiaries, based on the approach set out in
35 Section 6.5.3 of the TSC. Rather than attempt to describe the process in detail, a
36 copy of the TSC requirements (pages 56-59) is attached as Appendix 2 to this
37 interrogatory response. Hydro One’s “Transmission Connection Procedures”

1 (pages 36-38) provide further information on the true-up procedure for load
2 customer. This is available on Hydro One's web-site at:

3 [https://www.hydroone.com/businessservices /Documents/Transmission%20Conn](https://www.hydroone.com/businessservices/Documents/Transmission%20Connection%20Procedures_Updated%20-%20Nov%2018%202015.pdf)
4 [ection%20Procedures_Updated%20-%20Nov%2018%202015.pdf](https://www.hydroone.com/businessservices/Documents/Transmission%20Connection%20Procedures_Updated%20-%20Nov%2018%202015.pdf)

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6 c) Hydro One Distribution relies on Section 3.6.1 of the DSC, as quoted below:

7

8 **“3.6 Upstream Transmission Connections**

9 3.6.1 Where a distributor has been required to provide a capital contribution to a
10 transmitter under the Transmission System Code for the purpose of a new or
11 modified transmitter-owned connection facility, and the new or modified
12 transmitter-owned connection facility also meets the needs of an embedded
13 distributor and/or a load customer with a non-coincident peak demand that is
14 equal to or greater than 5 MW, the distributor shall require a capital contribution
15 from all beneficiaries that contributed to the need for the new or modified
16 transmitter-owned connection facility based on their respective incremental
17 capacity requirements and the total project cost. The distributor shall request
18 that the transmitter, who owns the connection facility, calculate the capital
19 contribution amount for each beneficiary using the methodology and inputs
20 described in Appendix 5 of the Transmission System Code.”

21

22 d) Hydro One notes that there is no parallel requirement in the DSC for prior Board
23 review and approval where distributors attribute transmission investment costs to
24 their customers in accordance with the cost recovery provisions of the DSC, and does
25 not perceive the need for such review as part of the leave to construct proceeding.

26

27 Instead, once the transmission project costs are finalized Hydro One anticipates
28 following the requirements of the TSC and DSC. All participants move into the pre-
29 contractual phase, entailing a request from Hydro One Distribution (as the host
30 distributor) for updated forecasts from the other beneficiaries. Hydro One
31 Transmission would calculate the cost allocation and final capital contribution, if
32 needed, for each individual beneficiary. Experts on the economic evaluation model
33 can be available to discuss the calculations with the customer, who has the right to
34 update their load forecast, following which, a final economic evaluation will be done,
35 which forms the basis for the cost component of the contract with Hydro One.

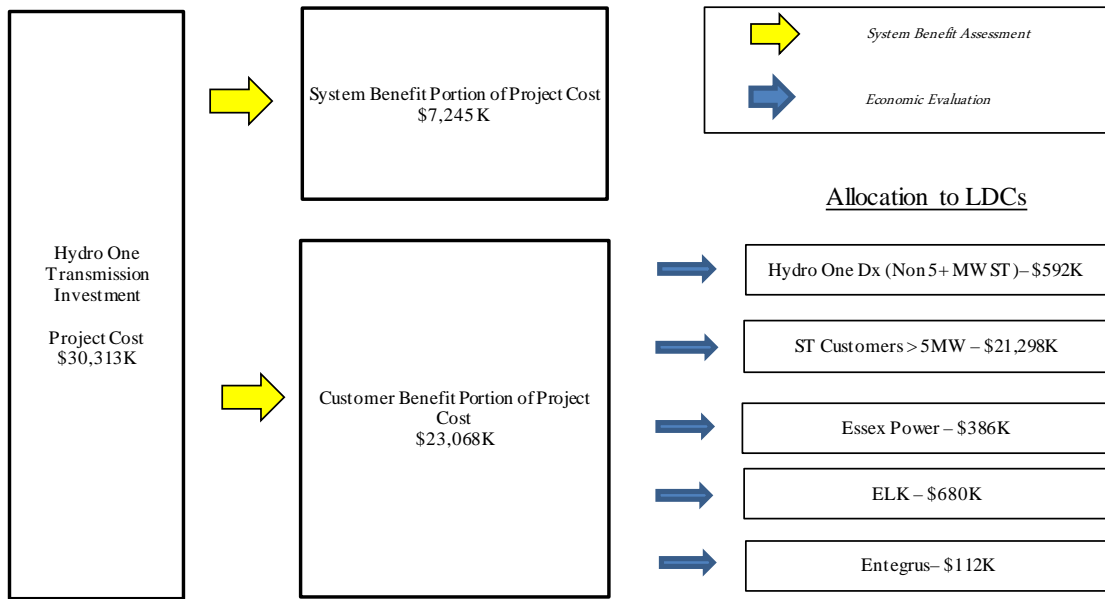
36

37 e) Please see the response to part b) of this Interrogatory.

APPENDIX 1

**DETAILED CALCULATIONS OF “SECTR” CAPITAL CONTRIBUTIONS
FOR HYDRO ONE NETWORKS’
TRANSFORMATION, LINE AND NETWORK POOLS**

Table 1: Transformation Pool Capital Contribution Summary



Distributor	Non-Coincident Incremental Peak Load (MW)	Cost Allocation Percentage based on Capacity Required (%)	Cost Allocation (\$K)	Capital Contribution Based on Economic Evaluation (\$K)
Hydro One Dx (Non 5+ MW ST)	67	3%	592	579
Hydro One Dx ST Customers - 5+ MW Consistent Monthly Peak	111	62%	14,270	0
Hydro One Dx ST Customers - 5+ MW Fluctuating Monthly Peak	55	30%	7,028	2,458
Essex Power	32	2%	386	9
ELK	31	3%	680	0
Entegrus	3	0%	112	35
TOTAL	299	100%	23,068	3,080

Table 2: Allocation of Transformation Project Costs

Benefiting Customer	% Allocation of Contracted Capacity
Hydro One Dx (Non 5+ MW ST)	2.6%
Hydro One Dx ST Customers - 5+ MW Consistent Monthly Peak	61.9%
Hydro One Dx ST Customers - 5+ MW Fluctuating Monthly Peaks	30.5%
Essex Powerlines	1.7%
ELK Hydro	2.9%
Entergus	0.5%
Total	100%

Allocation of Project Costs

Land Project Expenditures Allocated Tx to Dx (\$k)	\$ 484.8
Class 47 Project Expenditures Allocated Tx to Dx (\$k)	\$ 22,583.4
Total Expenditures	\$ 23,068.2

Benefiting Customer	% of Capacity	Land Project Expenditures Allocated to Beneficiaries	Class 47 Expenditures Allocated to Beneficiaries	Total Expenditures Allocated to Beneficiaries
Hydro One Dx (Non 5+ MW ST)	2.6%	\$ 12.4	\$ 579.6	\$ 592.0
Hydro One Dx ST Customers - 5+ MW Consistent Monthly Peak	61.9%	\$ 299.9	\$ 13,970.1	\$ 14,270.0
Hydro One Dx ST Customers - 5+ MW Fluctuating Monthly Peak	30.5%	\$ 147.7	\$ 6,880.8	\$ 7,028.5
Essex Powerlines	1.7%	\$ 8.1	\$ 378.3	\$ 386.4
ELK Hydro	2.9%	\$ 14.3	\$ 665.4	\$ 679.7
Entergus	0.5%	\$ 2.3	\$ 109.3	\$ 111.7
Total	100.0%	\$ 484.8	\$ 22,583.4	\$ 23,068.2

Table 3: Distributor Specific Load Forecasts, Allocation of Capacity & Incremental Load for Transformation Pool

Capacity as per EB-2014-0421

Kingsville 120

Post In-service Capacity

Kingsville	120
Leamington	180
Total Capacity	300
Minus Current	120
Incremental Capacity	180

	Historical Capacity requirement (As per EB-2014-0421)	% of Historical Capacity required	Allocation of Current Kingsville Contracted Capacity	Forecast Period Total Contracted Capacity (Peak Load)	Incremental Contracted Capacity	% of Utilized Incremental Capacity	Incremental Costs Assigned
Hydro One Dx (Non 5+ MW ST)	74.7	51.8%	62.2	66.8	4.6	2.6%	2.6%
Hydro One Dx ST Customers - 5+ MW Consistent Monthly Peak	-	0.0%	-	110.8	110.8	61.9%	61.9%
Hydro One Dx ST Customers - 5+ MW Fluctuating Monthly Peak	-	0.0%	-	54.6	54.6	30.5%	30.5%
Essex Powerlines	35.3	24.5%	29.4	32.4	3.0	1.7%	1.7%
ELK Hydro	31.5	21.8%	26.2	31.5	5.3	2.9%	2.9%
Entegrus	2.6	1.8%	2.2	3.1	0.9	0.5%	0.5%
	144.2	100%	120.0	299.1	179.1	100%	100%

Table 4: Derivation of Load used for Hydro One Distribution (Non 5+ MW ST) Transformation Pool

		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Load Forecast	MW	60.2	60.2	60.3	60.4	60.9	61.0	61.5	61.6	62.1	62.2	62.7	62.8	63.3
Allocation of Current Capacity	MW	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2
Incremental Load	MW	(2.0)	(2.0)	(1.9)	(1.8)	(1.3)	(1.2)	(0.7)	(0.6)	(0.1)	(0.0)	0.5	0.6	1.1
PLI-adjustment		81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%
PLI-adjusted load in excess of capacity	MW	(1.6)	(1.6)	(1.6)	(1.5)	(1.1)	(1.0)	(0.6)	(0.5)	(0.1)	(0.0)	0.4	0.5	0.9
Adjusted for in-service month:														
Project Year*		1	2	3	4	5	6	7	8	9	10	11	12	
		2018 to	2019 to	2020 to	2021 to	2022 to	2023 to	2024 to	2025 to	2026 to	2027 to	2028 to	2029 to	
		March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	
Load in excess of capacity, project-year basis	MW	-1.6	-1.6	-1.5	-1.4	-1.1	-0.9	-0.6	-0.4	-0.1	0.1	0.4	0.6	
		2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Load Forecast	MW	63.4	63.9	64.0	64.5	64.6	65.1	65.1	65.6	65.7	66.2	66.3	66.7	66.8
Allocation of Current Capacity	MW	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2
Incremental Load	MW	1.2	1.7	1.8	2.3	2.4	2.9	2.9	3.4	3.5	4.0	4.1	4.5	4.6
PLI-adjustment		81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%
PLI-adjusted load in excess of capacity	MW	0.9	1.4	1.4	1.8	1.9	2.3	2.4	2.8	2.8	3.2	3.3	3.6	3.7
Adjusted for in-service month:														
Project Year*		13	14	15	16	17	18	19	20	21	22	23	24	25
		2030 to	2031 to	2032 to	2033 to	2034 to	2035 to	2036 to	2037 to	2038 to	2039 to	2040 to	2041 to	2042 to
		March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,
Load in excess of capacity, project-year basis	MW	0.9	1.1	1.4	1.5	1.9	2.0	2.3	2.5	2.8	2.9	3.3	3.4	3.7

Table 5: Derivation of Load used for Hydro One Dx ST Customers - 5+ MW Consistent Monthly Peak Transformation Pool

		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Load Forecast	MW	64.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8
Allocation of Current Capacity	MW	-	-	-	-	-	-	-	-	-	-	-	-	-
Incremental Load	MW	64.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8
PLI-adjustment		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PLI-adjusted load in excess of capacity	MW	64.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8
Adjusted for in-service month:														
Project Year*		1	2	3	4	5	6	7	8	9	10	11	12	
		2018 to	2019 to	2020 to	2021 to	2022 to	2023 to	2024 to	2025 to	2026 to	2027 to	2028 to	2029 to	
		March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	
Load in excess of capacity, project-year basis	MW	76.3	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8
		2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Load Forecast	MW	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8
Allocation of Current Capacity	MW	-	-	-	-	-	-	-	-	-	-	-	-	-
Incremental Load	MW	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8
PLI-adjustment		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PLI-adjusted load in excess of capacity	MW	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8
Adjusted for in-service month:														
Project Year*		13	14	15	16	17	18	19	20	21	22	23	24	25
		2030 to	2031 to	2032 to	2033 to	2034 to	2035 to	2036 to	2037 to	2038 to	2039 to	2040 to	2041 to	2042 to
		March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,
Load in excess of capacity, project-year basis	MW	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8

Table 6: Derivation of Load used for Hydro One Dx ST Customers - 5+ MW Fluctuating Monthly Peak Transformation Pool

		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Load Forecast	MW	31.9	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
Allocation of Current Capacity	MW	-	-	-	-	-	-	-	-	-	-	-	-	-
Incremental Load	MW	31.9	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
PLI-adjustment		68%	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%
PLI-adjusted load in excess of capacity	MW	21.7	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1

Adjusted for in-service month:

Project Year*		1	2	3	4	5	6	7	8	9	10	11	12
		2018 to	2019 to	2020 to	2021 to	2022 to	2023 to	2024 to	2025 to	2026 to	2027 to	2028 to	2029 to
		March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,
Load in excess of capacity, project-year basis	MW		25.5	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1

		2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Load Forecast	MW	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
Allocation of Current Capacity	MW	-	-	-	-	-	-	-	-	-	-	-	-	-
Incremental Load	MW	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
PLI-adjustment		68%	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%
PLI-adjusted load in excess of capacity	MW	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1

Adjusted for in-service month:

Project Year*		13	14	15	16	17	18	19	20	21	22	23	24	25
		2030 to	2031 to	2032 to	2033 to	2034 to	2035 to	2036 to	2037 to	2038 to	2039 to	2040 to	2041 to	2042 to
		March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,	March 30,
Load in excess of capacity, project-year basis	MW	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1

Table 7: Derivation of Load used for Essex Powerlines Transformation Pool

		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Load Forecast	MW	32.4	32.4	32.3	32.3	32.3	32.2	32.2	32.2	32.1	32.1	32.1	32.1	32.0
Allocation of Current Capacity	MW	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4
Incremental Load	MW	3.0	3.0	2.9	2.9	2.9	2.8	2.8	2.8	2.7	2.7	2.7	2.6	2.6
PLI-adjustment		67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%
PLI-adjusted load in excess of capacity	MW	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8

Adjusted for in-service month:

Project Year*		1	2	3	4	5	6	7	8	9	10	11	12
		March 31,	March 31,	March 31,	March 31,	March 31,	March 31,	March 31,	March 31,	March 31,	March 31,	March 31,	March 31,
		2018 to	2019 to	2020 to	2021 to	2022 to	2023 to	2024 to	2025 to	2026 to	2027 to	2028 to	2029 to
Load in excess of capacity, project-year basis	MW		2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8

		2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Load Forecast	MW	32.0	32.0	32.0	31.9	31.9	31.9	31.9	31.9	31.8	31.8	31.8	31.8	31.8
Allocation of Current Capacity	MW	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4
Incremental Load	MW	2.6	2.6	2.6	2.5	2.5	2.5	2.5	2.4	2.4	2.4	2.4	2.4	2.4
PLI-adjustment		67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%
PLI-adjusted load in excess of capacity	MW	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6

Adjusted for in-service month:

Project Year*		13	14	15	16	17	18	19	20	21	22	23	24	25
		March 31,	March 31,	March 31,	March 31,	March 31,	March 31,	March 31,	March 31,	March 31,	March 31,	March 31,	March 31,	March 31,
		2030 to	2031 to	2032 to	2033 to	2034 to	2035 to	2036 to	2037 to	2038 to	2039 to	2040 to	2041 to	2042 to
Load in excess of capacity, project-year basis	MW	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6

Table 8: Derivation of Load used for E.L.K. Transformation Pool

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Load Forecast	MW 31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5
Allocation of Current Capacity	MW 26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2
Incremental Load	MW 5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
PLI-adjustment	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
PLI-adjusted load in excess of capacity	MW 4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Adjusted for in-service month:													
Project Year*	1	2	3	4	5	6	7	8	9	10	11	12	
	March 31, 2018 to	March 31, 2019 to	March 31, 2020 to	March 31, 2021 to	March 31, 2022 to	March 31, 2023 to	March 31, 2024 to	March 31, 2025 to	March 31, 2026 to	March 31, 2027 to	March 31, 2028 to	March 31, 2029 to	
Load in excess of capacity, project-year basis	MW 4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Load Forecast	MW 31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5
Allocation of Current Capacity	MW 26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2
Incremental Load	MW 5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
PLI-adjustment	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
PLI-adjusted load in excess of capacity	MW 4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Adjusted for in-service month:													
Project Year*	13	14	15	16	17	18	19	20	21	22	23	24	25
	March 31, 2030 to	March 31, 2031 to	March 31, 2032 to	March 31, 2033 to	March 31, 2034 to	March 31, 2035 to	March 31, 2036 to	March 31, 2037 to	March 31, 2038 to	March 31, 2039 to	March 31, 2040 to	March 31, 2041 to	March 31, 2042 to
Load in excess of capacity, project-year basis	MW 4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Table 9: Derivation of Load used for Entegrus Transformation Pool

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Load Forecast	MW 2.6	2.7	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.8	2.8
Allocation of Current Capacity	MW 2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Incremental Load	MW 0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6
PLI-adjustment	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
PLI-adjusted load in excess of capacity	MW 0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
Adjusted for in-service month:													
Project Year*	1	2	3	4	5	6	7	8	9	10	11	12	
	March 31, 2018 to	March 31, 2019 to	March 31, 2020 to	March 31, 2021 to	March 31, 2022 to	March 31, 2023 to	March 31, 2024 to	March 31, 2025 to	March 31, 2026 to	March 31, 2027 to	March 31, 2028 to	March 31, 2029 to	
Load in excess of capacity, project-year basis	MW 0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Load Forecast	MW 2.8	2.8	2.8	2.9	2.9	2.9	2.9	3.0	3.0	3.0	3.0	3.0	3.1
Allocation of Current Capacity	MW 2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Incremental Load	MW 0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.9
PLI-adjustment	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
PLI-adjusted load in excess of capacity	MW 0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7
Adjusted for in-service month:													
Project Year*	13	14	15	16	17	18	19	20	21	22	23	24	25
	March 31, 2030 to	March 31, 2031 to	March 31, 2032 to	March 31, 2033 to	March 31, 2034 to	March 31, 2035 to	March 31, 2036 to	March 31, 2037 to	March 31, 2038 to	March 31, 2039 to	March 31, 2040 to	March 31, 2041 to	March 31, 2042 to
Load in excess of capacity, project-year basis	MW 0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6

Table 10: Transformation Pool Capital Contribution Calculation: Hydro One Distribution (Non 5+ MW ST)

Date: 23-Jun-19 Project #: 17503		SUMMARY OF CONTRIBUTION CALCULATIONS Transformation Pool - Estimated cost																											
Facility Name: Supply to Essex County Transmission Reinforcement																													
Description: Transformation Pool Capital Contribution																													
Customer: Hydro One Distribution																													
Month Year	In-Service Date		Project year ended - annualized from In-Service Date																										
	Jun-30 2018	Jun-30 2019	Jun-30 2020	Jun-30 2021	Jun-30 2022	Jun-30 2023	Jun-30 2024	Jun-30 2025	Jun-30 2026	Jun-30 2027	Jun-30 2028	Jun-30 2029	Jun-30 2030	Jun-30 2031	Jun-30 2032	Jun-30 2033	Jun-30 2034	Jun-30 2035	Jun-30 2036	Jun-30 2037	Jun-30 2038	Jun-30 2039	Jun-30 2040	Jun-30 2041	Jun-30 2042	Jun-30 2043			
Revenue & Expense Forecast																													
Load Forecast (MW)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Load adjustments (MW)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tariff Applied (\$/kW/Month)	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	
Incremental Revenue - \$k	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Removal Costs - \$k	0.0																												
On-going O&M&A Costs - \$k		(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	
Municipal Tax - \$k		(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	
Net Revenue/(Costs) before taxes - \$k	0.0	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	
Income Taxes - \$k	0.0	9.0	14.7	13.7	12.9	12.1	13.6	12.9	12.3	11.7	10.7	8.0	6.6	4.1	2.7	0.3	0.1	(2.3)	(3.5)	(5.9)	(7.9)	(9.9)	(12.6)	(15.4)	(18.6)	(21.9)	(25.2)	(28.5)	
Operating Cash Flow (after taxes) - \$k	0.0	(1.9)	3.8	2.8	2.0	1.2	(0.8)	(6.5)	(7.1)	(7.7)	(8.7)	(1.3)	1.0	6.6	8.9	14.3	13.6	19.1	21.5	27.0	29.4	34.9	37.5	42.7	44.9	49.7			
PV Operating Cash Flow (after taxes) - \$k (A)	97.7	0.0	(1.8)	3.5	2.5	1.6	0.9	(4.2)	(4.5)	(4.6)	(4.7)	(3.9)	(0.7)	0.5	3.2	4.2	6.3	5.7	7.6	8.1	9.6	9.9	11.0	11.2	12.1	12.0	12.5		
Capital Expenditures - \$k																													
Capital cost before overheads & AFUDC - \$k		(592.0)																											
Overheads - \$k		0.0																											
AFUDC - \$k		0.0																											
Total upfront capital expenditures - \$k		(592.0)																											
On-going capital expenditures - \$k			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PV On-going capital expenditures - \$k			0.0																										
Total capital expenditures - \$k		(592.0)																											
PV CCA Residual Tax Shield - \$k		2.8																											
PV Working Capital - \$k		0.0																											
PV Capital (after taxes) - \$k (B)	(589.2)	(589.2)																											
Cumulative PV Cash Flow (after taxes) - \$k (A) + (B)	(491.5)	(589.2)	(591.0)	(587.5)	(585.1)	(583.5)	(582.6)	(586.8)	(591.3)	(595.9)	(600.7)	(604.6)	(605.3)	(604.8)	(601.6)	(597.4)	(591.1)	(585.4)	(577.8)	(569.7)	(560.2)	(550.3)	(539.3)	(528.1)	(516.0)	(504.0)	(491.5)		

Discounted Cash Flow Summary			
Economic Study Horizon - Years:	25		
Discount Rate - %	5.78%		
	Before Cont	After Cont	Impact
	\$k	\$k	\$k
PV Incremental Revenue	252.7	252.7	
PV O&M&A Costs	(203.9)	(203.9)	
PV Municipal Tax	(33.3)	(33.3)	
PV Income Taxes	(4.1)	(4.1)	0.0
PV CCA Tax Shield	89.1	2.0	(87.1)
PV Capital - Upfront	(592.0)	(592.0)	
Add: PV Capital Contribution	0.0	(592.0)	578.6
PV Capital - On-going	0.0	0.0	
PV Working Capital	0.0	0.0	
PV Surplus / (Shortfall)	(491.5)	0.0	491.5
Profitability Index*	0.2	1.0	

Capital Contributions			
	Date	PV of Cont \$k	Current Cont / (Credit) \$k
Initial economic evaluation	2018	578.6	578.6
Total		578.6	578.6
Contribution Required (before HST)			578.6
HST @ 13%			75.2
Contribution Required (including HST)*			653.8
Notes:	1) Payment from customer must include HST.		

Other Assumptions		Notes:
In-Service Date:	30-Jun-18	
Municipal Tax	0.42%	Transmission system average
Federal Income Tax	15.00%	2016 federal corporate income tax
Ontario Corporation Income Tax	11.50%	2016 provincial corporate income tax
Working cash net lag days	-1.04	As per Lead Lag Study as prepared by Navigant for 2015/2016 rates
CCA Rate for Class 47 Assets	8%	100% Class 47 assets except for Land

Calculation Time Stamp: 23-Jun-19, 10:38 AM

Table 11: Transformation Pool Capital Contribution Calculation: Hydro One Dx ST Customers - 5+ MW Consistent Monthly Peak



Date: 10-Jul-19 Project #: 17503		SUMMARY OF CONTRIBUTION CALCULATIONS Transformation Pool - Estimated cost																				
Facility Name: Supply to Essex County Transmission Reinforcement																						
Description: Transformation Pool Capital Contribution																						
Customer: Hydro One Dx ST Customers - 5+ MW Consistent Monthly Peak																						
Month	Year	In-Service Date										Project year ended - annualized from In-Service Date										
		Jun-30 2018	Jun-30 2019	Jun-30 2020	Jun-30 2021	Jun-30 2022	Jun-30 2023	Jun-30 2024	Jun-30 2025	Jun-30 2026	Jun-30 2027	Jun-30 2028	1st Year-up	2nd Year-up	3rd Year-up	4th Year-up	5th Year-up	6th Year-up	7th Year-up	8th Year-up	9th Year-up	10th Year-up
Revenue & Expense Forecast																						
Load Forecast (MW)		76.3	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8
Load adjustments (MW)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tariff Applied (\$/kWh/Month)		76.3	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8
Incremental Revenue - \$k		2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02
Removal Costs - \$k		0.0	1,849.1	2,686.1	2,686.1	2,686.1	2,686.1	2,686.1	2,686.1	2,686.1	2,686.1	2,686.1	2,686.1	2,686.1	2,686.1	2,686.1	2,686.1	2,686.1	2,686.1	2,686.1	2,686.1	2,686.1
On-going OM&A Costs - \$k		0.0	(203.5)	(203.5)	(203.5)	(203.5)	(203.5)	(203.5)	(203.5)	(203.5)	(203.5)	(203.5)	(203.5)	(203.5)	(203.5)	(203.5)	(203.5)	(203.5)	(203.5)	(203.5)	(203.5)	(203.5)
Municipal Tax - \$k		0.0	(59.7)	(59.7)	(59.7)	(59.7)	(59.7)	(59.7)	(59.7)	(59.7)	(59.7)	(59.7)	(59.7)	(59.7)	(59.7)	(59.7)	(59.7)	(59.7)	(59.7)	(59.7)	(59.7)	(59.7)
Net Revenue/(Costs) before taxes - \$k		0.0	1,585.9	2,422.9	2,422.9	2,422.9	2,422.9	2,422.9	2,422.9	2,422.9	2,422.9	2,422.9	2,422.9	2,422.9	2,422.9	2,422.9	2,422.9	2,422.9	2,422.9	2,422.9	2,422.9	2,422.9
Income Taxes - \$k		0.0	(222.9)	(357.8)	(357.8)	(357.8)	(357.8)	(357.8)	(357.8)	(357.8)	(357.8)	(357.8)	(357.8)	(357.8)	(357.8)	(357.8)	(357.8)	(357.8)	(357.8)	(357.8)	(357.8)	(357.8)
Operating Cash Flow (after taxes) - \$k		0.0	1,313.7	2,065.2	2,065.2	2,065.2	2,065.2	2,065.2	2,065.2	2,065.2	2,065.2	2,065.2	2,065.2	2,065.2	2,065.2	2,065.2	2,065.2	2,065.2	2,065.2	2,065.2	2,065.2	2,065.2
Cumulative PV @ 5.78%			14,112.9	14,112.9	14,112.9	14,112.9	14,112.9	14,112.9	14,112.9	14,112.9	14,112.9	14,112.9	14,112.9	14,112.9	14,112.9	14,112.9	14,112.9	14,112.9	14,112.9	14,112.9	14,112.9	14,112.9
PV Operating Cash Flow (after taxes) - \$k (A)			0.0	1,277.3	1,898.3	1,774.9	1,660.8	1,555.1	1,347.4	1,262.5	1,163.7	1,110.5	1,042.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital Expenditures - \$k																						
Capital cost before overheads & AFUDC - \$k			(14,270.0)																			
- Overheads - \$k			0.0																			
- AFUDC - \$k			0.0																			
Total upfront capital expenditures - \$k			(14,270.0)																			
On-going capital expenditures - \$k			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV On-going capital expenditures - \$k			0.0																			
Total capital expenditures - \$k			(14,270.0)																			
PV CCA Residual Tax Shield - \$k			555.7																			
PV Working Capital - \$k			0.3																			
PV Capital (after taxes) - \$k (B)			(13,713.9)																			
Cumulative PV Cash Flow (after taxes) - \$k (A) + (B)			399.0	(13,713.9)	(12,436.6)	(10,536.3)	(8,763.4)	(7,102.6)	(5,547.5)	(4,200.1)	(2,937.8)	(1,753.9)	(643.4)	399.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Discounted Cash Flow Summary		Other Assumptions		Notes:	
Economic Study Horizon - Years:	10	In-Service Date:	30-Jun-18		
Discount Rate - %:	5.78%	Municipal Tax:	0.42%	Transmission system average	
	\$k	Federal Income Tax:	15.00%	2016 federal corporate income tax	
PV Incremental Revenue	19,736.6	Ontario Corporation Income Tax:	11.50%	2016 provincial corporate income tax	
PV OM&A Costs	(2,227.0)	Working cash net lag days:	-1.04	As per Lead Lag Study as prepared by Navigant for 2015/2016 rates	
PV Municipal Tax	(456.9)	CCA Rate for Class 47 Assets:	8%	100% Class 47 assets except for Land	
PV Income Taxes	(4,519.0)				
PV CCA Tax Shield	2,134.8				
PV Capital - Upfront	(14,270.0)				
Add: PV Capital Contribution	0.0				
PV Capital - On-going	0.0				
PV Working Capital	0.3				
PV Surplus / (Shortfall)	399.0				
Profitability Index*	1.0				

Notes:
*PV of total cash flow, excluding net capital expenditure & on-going capital & proceeds on disposal / PV of net capital expenditure & on-going capital & proceeds on disposal

Calculation Time Stamp: 10-Jul-19, 9:40 AM

Table 12: Transformation Pool Capital Contribution Calculation: Hydro One Dx ST Customers - 5+ MW Fluctuating Monthly Peak



Date: 10-Jul-19 Project #: 17503		SUMMARY OF CONTRIBUTION CALCULATIONS Transformation Pool - Estimated cost																			
Facility Name: Supply to Essex County Transmission Reinforcement Description: Transformation Pool Capital Contribution Customer: ST Customers 5+ MW Fluctuating Monthly Peak																					
		In-Service																			
		Project year ended - annualized from In-Service Date																			
		Date																			
		Jun-30 2018 Jun-30 2019 Jun-30 2020 Jun-30 2021 Jun-30 2022 Jun-30 2023 Jun-30 2024 Jun-30 2025 Jun-30 2026 Jun-30 2027 Jun-30 2028																			
		1st rise-up 2nd rise-up 3rd rise-up																			
		0 1 2 3 4 5 6 7 8 9 10																			
Revenue & Expense Forecast																					
Load Forecast (MW)		25.5 37.1 37.1 37.1 37.1 37.1 37.1 37.1 37.1 37.1 37.1 37.1 37.1 37.1 37.1 37.1 37.1 37.1 37.1 37.1																			
Load adjustments (MW)		0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0																			
Tariff Applied (\$/kW/Month)		2.02 2.02 2.02 2.02 2.02 2.02 2.02 2.02 2.02 2.02 2.02 2.02 2.02 2.02 2.02 2.02 2.02 2.02 2.02 2.02																			
Incremental Revenue - \$k		619.3 899.7 899.7 899.7 899.7 899.7 899.7 899.7 899.7 899.7 899.7 899.7 899.7 899.7 899.7 899.7 899.7 899.7 899.7 899.7																			
Removal Costs - \$k		0.0																			
On-going O&M&A Costs - \$k		0.0																			
Municipal Tax - \$k		(29.4)																			
Net Revenue/(Costs) before taxes - \$k		489.7 770.0 770.0 770.0 770.0 770.0 770.0 770.0 770.0 770.0 770.0 770.0 770.0 770.0 770.0 770.0 770.0 770.0 770.0 770.0																			
Income Taxes - \$k		(56.8)																			
Operating Cash Flow (after taxes) - \$k		432.8 706.0 694.8 684.5 678.0 672.2 664.6 657.2 650.4 643.1 636.1 629.1 622.1 615.1 608.1 601.1 594.1 587.1 580.1 573.1 566.1																			
Cumulative PV @ 5.78%		4,664.7																			
PV Operating Cash Flow (after taxes) - \$k (A)		4,664.7																			
Capital Expenditures - \$k																					
Capital cost before overheads & AFUDC - \$k		(7,028.5)																			
- Overheads - \$k		0.0																			
- AFUDC - \$k		0.0																			
Total upfront capital expenditures - \$k		(7,028.5)																			
On-going capital expenditures - \$k		0.0																			
PV On-going capital expenditures - \$k		0.0																			
Total capital expenditures - \$k		(7,028.5)																			
PV CCA Residual Tax Shield - \$k		273.7																			
PV Working Capital - \$k		0.1																			
PV Capital (after taxes) - \$k (B)		(6,754.6)																			
Cumulative PV Cash Flow (after taxes) - \$k (A) + (B)		(2,089.9)																			

Discounted Cash Flow Summary			
Economic Study Horizon - Years:	10		
Discount Rate - %	5.78%		
	Before Cont	After Cont	Impact
	\$k	\$k	\$k
PV Incremental Revenue	6,610.3	6,610.3	
PV O&M&A Costs	(1,096.9)	(1,096.9)	
PV Municipal Tax	(225.0)	(225.0)	
PV Income Taxes	(1,401.4)	(1,401.4)	
PV CCA Tax Shield	1,051.5	683.8	(367.7)
PV Capital - Upfront	(7,028.5)	(7,028.5)	
Add PV Capital Contribution	0.0	2,457.5	(4,571.0)
PV Capital - On-going	0.0	0.0	
PV Working Capital	0.1	0.1	
PV Surplus / (Shortfall)	(2,089.9)	0.0	2,089.9
Profitability Index ¹	0.7	1.0	

Capital Contributions			
	Date	PV of Cont \$k	Current Cont / (Credit) \$k
Initial economic evaluation	2018	2,457.5	2,457.5
Total		2,457.5	2,457.5
Contribution Required (before HST)			2,457.5
HST @ 13%			319.5
Contribution Required (including HST)¹			2,777.0

Other Assumptions		Notes:
In-Service Date:	30-Jun-18	
Municipal Tax	0.42%	Transmission system average
Federal Income Tax	15.00%	2016 federal corporate income tax
Ontario Corporation Income Tax	11.50%	2016 provincial corporate income tax
Working cash net lag days	-1.04	As per Lead Lag Study as prepared by Navigant for 2015/2016 rates
CCA Rate for Class 47 Assets	8%	100% Class 47 assets except for Land

Notes:
¹ Payment from customer must include HST.

Calculation Time Stamp: 10-Jul-19, 9:42 AM

Table 13: Transformation Pool Capital Contribution Calculation: Essex Powerlines



Date: 23-Jun-19 Project #: 1759		SUMMARY OF CONTRIBUTION CALCULATIONS Transformation Pool - Estimated cost																										
Facility Name: Supply to Essex County Transmission Reinforcement																												
Description: Transformation Pool Capital Contribution																												
Customer: Essex Powerlines																												
In-Service		Project year ended - annualized from In-Service Date																										
Date		----->																										
Month	Year	Jun-30 2018	Jun-30 2019	Jun-30 2020	Jun-30 2021	Jun-30 2022	Jun-30 2023	Jun-30 2024	Jun-30 2025	Jun-30 2026	Jun-30 2027	Jun-30 2028	Jun-30 2029	Jun-30 2030	Jun-30 2031	Jun-30 2032	Jun-30 2033	Jun-30 2034	Jun-30 2035	Jun-30 2036	Jun-30 2037	Jun-30 2038	Jun-30 2039	Jun-30 2040	Jun-30 2041	Jun-30 2042	Jun-30 2043	
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
Revenue & Expense Forecast																												
Load Forecast (MW)		2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	
Load adjustments (MW)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tariff Applied (\$/KWh/Month)		2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	
Incremental Revenue - \$k		2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	
Removal Costs - \$k		48.6	47.9	47.3	46.7	46.2	45.6	45.1	44.6	44.2	43.7	43.3	42.9	42.5	42.1	41.7	41.4	41.0	40.7	40.3	40.0	39.7	39.4	39.0	38.7	38.4	38.4	
On-going O&M&A Costs - \$k		0.0	(5.5)	(5.5)	(5.5)	(5.5)	(5.5)	(11.0)	(11.0)	(11.0)	(11.0)	(11.0)	(11.0)	(11.0)	(11.0)	(11.0)	(11.0)	(13.8)	(13.8)	(13.8)	(13.8)	(13.8)	(13.8)	(13.8)	(13.8)	(13.8)	(13.8)	
Municipal Tax - \$k		0.0	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	
Net Revenue/(Costs) before taxes - \$k		0.0	41.4	40.8	40.2	39.6	39.0	33.0	32.5	32.0	31.5	31.1	30.7	30.2	29.8	29.5	29.1	26.0	25.6	25.3	24.9	24.6	24.3	24.0	23.7	23.3	23.0	
Income Taxes - \$k		0.0	(7.0)	(3.1)	(3.8)	(4.0)	(4.4)	(3.2)	(3.5)	(3.9)	(4.1)	(4.3)	(4.5)	(4.7)	(4.8)	(5.0)	(5.1)	(4.5)	(4.8)	(4.7)	(4.7)	(4.8)	(4.9)	(4.9)	(4.9)	(5.0)	(5.0)	
Operating Cash Flow (after taxes) - \$k		0.0	34.5	37.7	36.6	35.6	34.7	29.8	29.0	28.2	27.5	26.8	26.2	25.6	25.0	24.5	24.0	21.5	21.0	20.6	20.2	19.8	19.4	19.1	18.7	18.4	18.1	
PV Operating Cash Flow (after taxes) - \$k (A)		0.0	33.5	34.6	31.8	29.3	26.9	21.9	20.1	18.5	17.0	15.7	14.5	13.4	12.4	11.5	10.6	9.0	8.3	7.7	7.1	6.6	6.1	5.7	5.3	4.9	4.6	
Capital Expenditures - \$k																												
Capital cost before overheads & AFUDC - \$k		(386.4)																										
- Overheads - \$k		0.0																										
- AFUDC - \$k		0.0																										
Total upfront capital expenditures - \$k		(386.4)																										
On-going capital expenditures - \$k		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
PV On-going capital expenditures - \$k		0.0																										
Total capital expenditures - \$k		(386.4)																										
PV CCA Residual Tax Shield - \$k		1.9																										
PV Working Capital - \$k		0.0																										
PV Capital (after taxes) - \$k (B)		(384.5)	(384.5)																									
Cumulative PV Cash Flow (after taxes) - \$k (A) + (B)		(7.3)	(384.5)	(351.0)	(316.3)	(284.5)	(255.3)	(228.3)	(205.5)	(186.4)	(167.9)	(150.8)	(135.1)	(120.6)	(107.2)	(94.9)	(83.3)	(72.7)	(63.7)	(55.4)	(47.6)	(40.5)	(33.9)	(27.7)	(22.0)	(16.7)	(11.8)	(7.3)

Discounted Cash Flow Summary			
Economic Study Horizon - Years:	25		
Discount Rate - %	5.78%		
	Before Cont	After Cont	Impact
	\$k	\$k	\$k
PV Incremental Revenue	591.4	591.4	
PV O&M&A Costs	(133.1)	(133.1)	
PV Municipal Tax	(21.7)	(21.7)	
PV Income Taxes	(115.7)	(115.7)	
PV CCA Tax Shield	58.2	56.9	(1.3)
PV Capital - Upfront	(386.4)		
Add: PV Capital Contribution	0.0	(386.4)	8.6
PV Capital - On-going	0.0	0.0	
PV Working Capital	0.0	0.0	
PV Surplus / (Shortfall)	(7.3)	(6.0)	7.3
Profitability Index*	1.0	1.0	

Capital Contributions			
Date	PV of Cont \$k	Previous Cont Payments \$k	Current Cont / (Credit) \$k
Initial economic evaluation 2018	8.6		8.6
Total	8.6	0.0	8.6
Contribution Required (before HST)			8.6
HST @ 13%			1.1
Contribution Required (including HST)¹			9.7

Other Assumptions		Notes:	
In-Service Date:	30-Jun-18		
Municipal Tax	0.42%		Transmission system average
Federal Income Tax	15.00%		2016 federal corporate income tax
Ontario Corporation Income Tax	11.50%		2016 provincial corporate income tax
Working cash net lag days	-1.04		As per Lead Lag Study as prepared by Navigant for 2015/2016 rates
CCA Rate for Class 47 Assets	8%		100% Class 47 assets except for Land

Notes:
 1) Payment from customer must include HST.

Calculation Time Stamp: 23-Jun-19, 10:23 AM

Table 15: Transformation Pool Capital Contribution Calculation: Entegrus



Date: 23-Jun-19 Project #: 17503		SUMMARY OF CONTRIBUTION CALCULATIONS Transformation Pool - Estimated cost																											
Facility Name: Supply to Essex County Transmission Reinforcement																													
Description: Transformation Pool Capital Contribution																													
Customer: Entegrus																													
Month	Year	In-Service Date																											
		Jun-30 2018	Jun-30 2019	Jun-30 2020	Jun-30 2021	Jun-30 2022	Jun-30 2023	Jun-30 2024	Jun-30 2025	Jun-30 2026	Jun-30 2027	Jun-30 2028	Jun-30 2029	Jun-30 2030	Jun-30 2031	Jun-30 2032	Jun-30 2033	Jun-30 2034	Jun-30 2035	Jun-30 2036	Jun-30 2037	Jun-30 2038	Jun-30 2039	Jun-30 2040	Jun-30 2041	Jun-30 2042	Jun-30 2043	Jun-30 2044	Jun-30 2045
Revenue & Expense Forecast																													
Load Forecast (MW)		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Load adjustments (MW)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tariff Applied (\$/KW/Month)		2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02
Incremental Revenue - \$k		6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Removal Costs - \$k		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-going OM&A Costs - \$k		0.0	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)
Municipal Tax - \$k		0.0	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)
Net Revenue/(Costs) before taxes - \$k		6.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Income Taxes - \$k		0.0	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)
Operating Cash Flow (after taxes) - \$k		6.1	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Cumulative PV @ 5.78%		61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4
PV Operating Cash Flow (after taxes) - \$k (A)		61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4
Capital Expenditures - \$k																													
Capital cost before overheads & AFUDC - \$k		(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)
- Overheads - \$k		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- AFUDC - \$k		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total upfront capital expenditures - \$k		(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)
On-going capital expenditures - \$k		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV On-going capital expenditures - \$k		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total capital expenditures - \$k		(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)	(111.7)
PV CCA Residual Tax Shield - \$k		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
PV Working Capital - \$k		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV Capital (after taxes) - \$k (B)		(111.1)	(111.1)	(111.1)	(111.1)	(111.1)	(111.1)	(111.1)	(111.1)	(111.1)	(111.1)	(111.1)	(111.1)	(111.1)	(111.1)	(111.1)	(111.1)	(111.1)	(111.1)	(111.1)	(111.1)	(111.1)	(111.1)	(111.1)	(111.1)	(111.1)	(111.1)	(111.1)	(111.1)
Cumulative PV Cash Flow (after taxes) - \$k (A) + (B)		(49.7)	(49.7)	(49.7)	(49.7)	(49.7)	(49.7)	(49.7)	(49.7)	(49.7)	(49.7)	(49.7)	(49.7)	(49.7)	(49.7)	(49.7)	(49.7)	(49.7)	(49.7)	(49.7)	(49.7)	(49.7)	(49.7)	(49.7)	(49.7)	(49.7)	(49.7)	(49.7)	(49.7)

Discounted Cash Flow Summary			
Economic Study Horizon - Years:	25		
Discount Rate - %	5.78%		
	Before Cont	After Cont	Impact
	\$k	\$k	\$k
PV Incremental Revenue	133.4	133.4	
PV OM&A Costs	(38.5)	(38.5)	
PV Municipal Tax	(6.3)	(6.3)	
PV Income Taxes	(23.5)	(23.5)	
PV CCA Tax Shield	16.8	11.5	(5.3)
PV Capital - Upfront	(111.7)	(111.7)	
Add: PV Capital Contribution	0.0	35.0	35.0
PV Capital - On-going	0.0	0.0	
PV Working Capital	0.0	0.0	
PV Surplus / (Shortfall)	(29.7)	(0.0)	29.7
Profitability Index*	0.7	1.0	

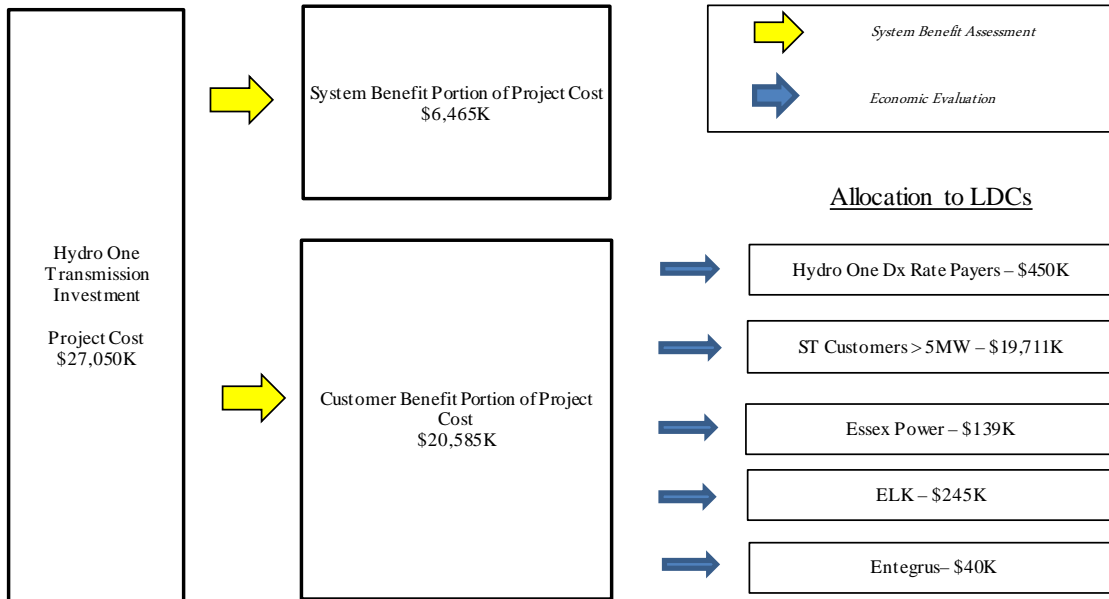
Capital Contributions			
	Date	PV of Cont \$k	Current Cont / (Credit) \$k
Initial economic evaluation	2018	35.0	35.0
Total		35.0	35.0
Contribution Required (before HST)			35.0
HST @ 13%			4.5
Contribution Required (including HST)¹			39.5

Other Assumptions		Notes:	
In-Service Date:	30-Jun-18		
Municipal Tax	0.42%	Transmission system average	
Federal Income Tax	15.00%	2016 federal corporate income tax	
Ontario Corporation Income Tax	11.50%	2016 provincial corporate income tax	
Working cash net lag days	-1.04	As per Lead Lag Study as prepared by Navigant for 2015/2016 rates	
CCA Rate for Class 47 Assets	8%	100% Class 47 assets except for Land	

Notes:
 1) Payment from customer must include HST.

Calculation Time Stamp: 23-Jun-18, 10:05 AM

Table 16: Line Pool Capital Contribution Summary



Distributor	Non-Coincident Incremental Peak Load (MW)	Cost Allocation Percentage based on Capacity Required (%)	Cost Allocation (\$K)	Capital Contribution Based on Economic Evaluation (\$K)
Hydro One Dx (Non 5+ MW ST)	72	2%	450	18
Hydro One Dx ST Customers - 5+ MW Consistent Monthly Peak	285	64%	13,207	0
Hydro One Dx ST Customers - 5+ MW Fluctuating Monthly Peak	140	32%	6,505	1,128
Essex Power	32	1%	139	0
ELK	31	1%	245	0
Entegrus	3	0%	40	0
TOTAL	564	100%	20,585	1,145

Table 17: Allocation of Line Project Costs

Benefiting Customer	% Allocation of Contracted Capacity
Hydro One Dx (Non 5+ MW ST)	2.2%
Hydro One Dx ST Customers - 5+ MW Consistent Monthly Peak	64.2%
Hydro One Dx ST Customers - 5+ MW Fluctuating Monthly Peak	31.6%
Essex Powerlines	0.7%
ELK Hydro	1.2%
Entergus	0.2%
	100%

Allocation of Project Costs

Land Project Expenditures Allocated Tx to Beneficiaries	\$ 4,220.5
Removal Expenditures Allocated to Beneficiaries	\$ -
Class 47 Project Expenditures Allocated Tx to Beneficiaries	\$ 16,364.5
Total	\$ 20,585.1

Benefiting Customer	% of Capacity	Land Project Costs Allocated to Beneficiaries	Removal Costs Allocated to Beneficiaries	Line 47 Costs Allocated to Beneficiaries	Total Expenditures Allocated to Beneficiaries
Hydro One Dx (Non 5+ MW ST)	2.2%	\$ 92	\$ -	\$ 357	\$ 450
Hydro One Dx ST Customers - 5+ MW Consistent Monthly Peak	64.2%	\$ 2,708	\$ -	\$ 10,499	\$ 13,207
Hydro One Dx ST Customers - 5+ MW Fluctuating Monthly Peak	31.6%	\$ 1,334	\$ -	\$ 5,171	\$ 6,505
Essex Powerlines	0.7%	\$ 29	\$ -	\$ 111	\$ 139
ELK Hydro	1.2%	\$ 50	\$ -	\$ 195	\$ 245
Entergus	0.2%	\$ 8	\$ -	\$ 32	\$ 40
Total	100.0%	\$ 4,220.5	\$ -	\$ 16,364.5	\$ 20,585.1

Table 18: Distributor Specific Load Forecasts, Allocation of Capacity & Incremental Load for Line Pool

Capacity as per EB-2014-0421

Kingsville 120

Post In-service Capacity

Kingsville 120

Leamington 550

Total Capacity 670

Minus Current 120

Incremental Capacity 550

	Historical Capacity requirement (As per EB-2014-0421)	% of Historical Capacity required	Allocation of Current Kingsville Contracted Capacity	Forecast Period Total Contracted Capacity (Peak Load)	Incremental Contracted Capacity	% of Utilized Incremental Capacity	Incremental Costs Assigned
Hydro One Dx (Non 5+ MW ST)	74.7	51.8%	62.2	71.9	9.7	2.2%	2.2%
Hydro One Dx ST Customers - 5+ MW Consistent Monthly Peak	-	0.0%	-	284.9	284.9	64.2%	64.2%
Hydro One Dx ST Customers - 5+ MW Fluctuating Monthly Peak	-	0.0%	-	140.3	140.3	31.6%	31.6%
Essex Powerlines	35.3	24.5%	29.4	32.4	3.0	0.7%	0.7%
ELK Hydro	31.5	21.8%	26.2	31.5	5.3	1.2%	1.2%
Entegrus	2.6	1.8%	2.2	3.1	0.9	0.2%	0.2%
	144.2	100%	120.00	564.03	444.03	100%	100%

Table 19: Derivation of Load used for Hydro One Distribution (Non 5+ MW ST) Line Pool

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Load Forecast	MW 64.8	62.4	62.8	65.5	66.0	66.1	66.6	66.7	67.2	67.3	67.8	67.9	68.4	
Allocation of Current Capacity	MW 62.2	-	-	-	-	-	-	-	-	-	-	-	-	
Incremental Load	MW 2.6	62.4	62.8	65.5	66.0	66.1	66.6	66.7	67.2	67.3	67.8	67.9	68.4	
PLI-adjustment	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	
PLI-adjusted load in excess of capacity	MW 2.1	50.5	50.9	53.0	53.4	53.5	53.9	54.0	54.4	54.5	54.9	55.0	55.4	
Adjusted for in-service month:														
Project Year*		1	2	3	4	5	6	7	8	9	10	11	12	
		March 31, 2018 to March 30, 2019	March 31, 2019 to March 30, 2020	March 31, 2020 to March 30, 2021	March 31, 2021 to March 30, 2022	March 31, 2022 to March 30, 2023	March 31, 2023 to March 30, 2024	March 31, 2024 to March 30, 2025	March 31, 2025 to March 30, 2026	March 31, 2026 to March 30, 2027	March 31, 2027 to March 30, 2028	March 31, 2028 to March 30, 2029	March 31, 2029 to March 30, 2030	
Load in excess of capacity, project-year basis	MW	14.2	50.6	51.4	53.1	53.5	53.6	53.9	54.1	54.4	54.6	54.9	55.1	
	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	
Load Forecast	MW 68.5	69.0	69.1	69.6	69.7	70.2	70.2	70.7	70.8	71.3	71.4	71.8	71.9	
Allocation of Current Capacity	MW -	-	-	-	-	-	-	-	-	-	-	-	-	
Incremental Load	MW 68.5	69.0	69.1	69.6	69.7	70.2	70.2	70.7	70.8	71.3	71.4	71.8	71.9	
PLI-adjustment	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	
PLI-adjusted load in excess of capacity	MW 55.5	55.9	55.9	56.4	56.4	56.8	56.9	57.3	57.4	57.8	57.8	58.2	58.2	
Adjusted for in-service month:														
Project Year*		13	14	15	16	17	18	19	20	21	22	23	24	25
		March 31, 2030 to March 30, 2031	March 31, 2031 to March 30, 2032	March 31, 2032 to March 30, 2033	March 31, 2033 to March 30, 2034	March 31, 2034 to March 30, 2035	March 31, 2035 to March 30, 2036	March 31, 2036 to March 30, 2037	March 31, 2037 to March 30, 2038	March 31, 2038 to March 30, 2039	March 31, 2039 to March 30, 2040	March 31, 2040 to March 30, 2041	March 31, 2041 to March 30, 2042	March 31, 2042 to March 30, 2043
Load in excess of capacity, project-year basis	MW	55.4	55.6	55.9	56.0	56.4	56.5	56.8	57.0	57.3	57.5	57.8	57.9	58.2

Table 20: Derivation of Load used for Hydro One Dx ST Customers - 5+ MW Consistent Monthly Peak Line Pool

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Load Forecast	MW 64.8	203.8	252.2	283.8	283.9	283.9	283.9	283.9	284.0	284.0	284.0	284.0	284.1	
Allocation of Current Capacity	MW -	-	-	-	-	-	-	-	-	-	-	-	-	
Incremental Load	MW 64.8	203.8	252.2	283.8	283.9	283.9	283.9	283.9	284.0	284.0	284.0	284.0	284.1	
PLI-adjustment	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
PLI-adjusted load in excess of capacity	MW 64.8	203.8	252.2	283.8	283.9	283.9	283.9	283.9	284.0	284.0	284.0	284.0	284.1	
Adjusted for in-service month:														
Project Year*		1	2	3	4	5	6	7	8	9	10	11	12	
		March 31, 2018 to March 30, 2019	March 31, 2019 to March 30, 2020	March 31, 2020 to March 30, 2021	March 31, 2021 to March 30, 2022	March 31, 2022 to March 30, 2023	March 31, 2023 to March 30, 2024	March 31, 2024 to March 30, 2025	March 31, 2025 to March 30, 2026	March 31, 2026 to March 30, 2027	March 31, 2027 to March 30, 2028	March 31, 2028 to March 30, 2029	March 31, 2029 to March 30, 2030	
Load in excess of capacity, project-year basis	MW	99.5	215.9	260.1	283.9	283.9	283.9	283.9	283.9	284.0	284.0	284.0	284.0	
	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	
Load Forecast	MW 284.1	284.1	284.1	284.2	284.2	284.2	284.2	284.2	284.3	284.3	284.3	284.3	284.9	
Allocation of Current Capacity	MW -	-	-	-	-	-	-	-	-	-	-	-	-	
Incremental Load	MW 284.1	284.1	284.1	284.2	284.2	284.2	284.2	284.2	284.3	284.3	284.3	284.3	284.9	
PLI-adjustment	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
PLI-adjusted load in excess of capacity	MW 284.1	284.1	284.1	284.2	284.2	284.2	284.2	284.2	284.3	284.3	284.3	284.3	284.9	
Adjusted for in-service month:														
Project Year*		13	14	15	16	17	18	19	20	21	22	23	24	25
		March 31, 2030 to March 30, 2031	March 31, 2031 to March 30, 2032	March 31, 2032 to March 30, 2033	March 31, 2033 to March 30, 2034	March 31, 2034 to March 30, 2035	March 31, 2035 to March 30, 2036	March 31, 2036 to March 30, 2037	March 31, 2037 to March 30, 2038	March 31, 2038 to March 30, 2039	March 31, 2039 to March 30, 2040	March 31, 2040 to March 30, 2041	March 31, 2041 to March 30, 2042	March 31, 2042 to March 30, 2043
Load in excess of capacity, project-year basis	MW	284.1	284.1	284.1	284.1	284.2	284.2	284.2	284.2	284.2	284.3	284.3	284.3	284.4

Table 21: Derivation of Load used for Hydro One Dx ST Customers - 5+ MW Fluctuating Monthly Peak Line Pool

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Load Forecast	MW 31.9	100.4	124.2	139.8	139.8	139.8	139.8	139.9	139.9	139.9	139.9	139.9	139.9	
Allocation of Current Capacity	MW -	-	-	-	-	-	-	-	-	-	-	-	-	
Incremental Load	MW 31.9	100.4	124.2	139.8	139.8	139.8	139.8	139.9	139.9	139.9	139.9	139.9	139.9	
PLI-adjustment	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%	
PLI-adjusted load in excess of capacity	MW 21.7	68.3	84.5	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	
Adjusted for in-service month:														
Project Year*		1	2	3	4	5	6	7	8	9	10	11	12	
		March 31, 2018 to March 30, 2019	March 31, 2019 to March 30, 2020	March 31, 2020 to March 30, 2021	March 31, 2021 to March 30, 2022	March 31, 2022 to March 30, 2023	March 31, 2023 to March 30, 2024	March 31, 2024 to March 30, 2025	March 31, 2025 to March 30, 2026	March 31, 2026 to March 30, 2027	March 31, 2027 to March 30, 2028	March 31, 2028 to March 30, 2029	March 31, 2029 to March 30, 2030	
Load in excess of capacity, project-year basis	MW		33.3	72.3	87.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	
	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	
Load Forecast	MW 139.9	139.9	139.9	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.3	
Allocation of Current Capacity	MW -	-	-	-	-	-	-	-	-	-	-	-	-	
Incremental Load	MW 139.9	139.9	139.9	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.3	
PLI-adjustment	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%	
PLI-adjusted load in excess of capacity	MW 95.1	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.4	
Adjusted for in-service month:														
Project Year*		13	14	15	16	17	18	19	20	21	22	23	24	25
		March 31, 2030 to March 30, 2031	March 31, 2031 to March 30, 2032	March 31, 2032 to March 30, 2033	March 31, 2033 to March 30, 2034	March 31, 2034 to March 30, 2035	March 31, 2035 to March 30, 2036	March 31, 2036 to March 30, 2037	March 31, 2037 to March 30, 2038	March 31, 2038 to March 30, 2039	March 31, 2039 to March 30, 2040	March 31, 2040 to March 30, 2041	March 31, 2041 to March 30, 2042	March 31, 2042 to March 30, 2043
Load in excess of capacity, project-year basis	MW	95.1	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.3

Table 22: Derivation of Load used for Essex Powerlines Line Pool

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Load Forecast	MW 32.4	32.4	32.3	32.3	32.3	32.2	32.2	32.2	32.1	32.1	32.1	32.1	32.0	
Allocation of Current Capacity	MW 29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	
Incremental Load	MW 3.0	3.0	2.9	2.9	2.9	2.8	2.8	2.8	2.7	2.7	2.7	2.6	2.6	
PLI-adjustment	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	
PLI-adjusted load in excess of capacity	MW 2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	
Adjusted for in-service month:														
Project Year*		1	2	3	4	5	6	7	8	9	10	11	12	
		March 31, 2018 to March 30, 2019	March 31, 2019 to March 30, 2020	March 31, 2020 to March 30, 2021	March 31, 2021 to March 30, 2022	March 31, 2022 to March 30, 2023	March 31, 2023 to March 30, 2024	March 31, 2024 to March 30, 2025	March 31, 2025 to March 30, 2026	March 31, 2026 to March 30, 2027	March 31, 2027 to March 30, 2028	March 31, 2028 to March 30, 2029	March 31, 2029 to March 30, 2030	
Load in excess of capacity, project-year basis	MW		2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	
	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	
Load Forecast	MW 32.0	32.0	32.0	31.9	31.9	31.9	31.9	31.9	31.8	31.8	31.8	31.8	31.8	
Allocation of Current Capacity	MW 29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	
Incremental Load	MW 2.6	2.6	2.6	2.5	2.5	2.5	2.5	2.4	2.4	2.4	2.4	2.4	2.4	
PLI-adjustment	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	
PLI-adjusted load in excess of capacity	MW 1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	
Adjusted for in-service month:														
Project Year*		13	14	15	16	17	18	19	20	21	22	23	24	25
		March 31, 2030 to March 30, 2031	March 31, 2031 to March 30, 2032	March 31, 2032 to March 30, 2033	March 31, 2033 to March 30, 2034	March 31, 2034 to March 30, 2035	March 31, 2035 to March 30, 2036	March 31, 2036 to March 30, 2037	March 31, 2037 to March 30, 2038	March 31, 2038 to March 30, 2039	March 31, 2039 to March 30, 2040	March 31, 2040 to March 30, 2041	March 31, 2041 to March 30, 2042	March 31, 2042 to March 30, 2043
Load in excess of capacity, project-year basis	MW	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6

Table 23: Derivation of Load used for E.L.K. Line Pool

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Load Forecast	MW 31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	
Allocation of Current Capacity	MW 26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	
Incremental Load	MW 5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	
PLI-adjustment	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	
PLI-adjusted load in excess of capacity	MW 4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Adjusted for in-service month:														
Project Year*		1	2	3	4	5	6	7	8	9	10	11	12	
		March 31, 2018 to March 30, 2019	March 31, 2019 to March 30, 2020	March 31, 2020 to March 30, 2021	March 31, 2021 to March 30, 2022	March 31, 2022 to March 30, 2023	March 31, 2023 to March 30, 2024	March 31, 2024 to March 30, 2025	March 31, 2025 to March 30, 2026	March 31, 2026 to March 30, 2027	March 31, 2027 to March 30, 2028	March 31, 2028 to March 30, 2029	March 31, 2029 to March 30, 2030	
Load in excess of capacity, project-year basis	MW	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	
Load Forecast	MW 31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	
Allocation of Current Capacity	MW 26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	
Incremental Load	MW 5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	
PLI-adjustment	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	
PLI-adjusted load in excess of capacity	MW 4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Adjusted for in-service month:														
Project Year*		13	14	15	16	17	18	19	20	21	22	23	24	25
		March 31, 2030 to March 30, 2031	March 31, 2031 to March 30, 2032	March 31, 2032 to March 30, 2033	March 31, 2033 to March 30, 2034	March 31, 2034 to March 30, 2035	March 31, 2035 to March 30, 2036	March 31, 2036 to March 30, 2037	March 31, 2037 to March 30, 2038	March 31, 2038 to March 30, 2039	March 31, 2039 to March 30, 2040	March 31, 2040 to March 30, 2041	March 31, 2041 to March 30, 2042	March 31, 2042 to March 30, 2043
Load in excess of capacity, project-year basis	MW	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Table 24: Derivation of Load used for Entegrus Line Pool

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Load Forecast	MW 2.6	2.7	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.8	2.8	
Allocation of Current Capacity	MW 2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
Incremental Load	MW 0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	
PLI-adjustment	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	
PLI-adjusted load in excess of capacity	MW 0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	
Adjusted for in-service month:														
Project Year*		1	2	3	4	5	6	7	8	9	10	11	12	
		March 31, 2018 to March 30, 2019	March 31, 2019 to March 30, 2020	March 31, 2020 to March 30, 2021	March 31, 2021 to March 30, 2022	March 31, 2022 to March 30, 2023	March 31, 2023 to March 30, 2024	March 31, 2024 to March 30, 2025	March 31, 2025 to March 30, 2026	March 31, 2026 to March 30, 2027	March 31, 2027 to March 30, 2028	March 31, 2028 to March 30, 2029	March 31, 2029 to March 30, 2030	
Load in excess of capacity, project-year basis	MW	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	
	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	
Load Forecast	MW 2.8	2.8	2.8	2.9	2.9	2.9	2.9	3.0	3.0	3.0	3.0	3.0	3.1	
Allocation of Current Capacity	MW 2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
Incremental Load	MW 0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.9	
PLI-adjustment	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	
PLI-adjusted load in excess of capacity	MW 0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7	
Adjusted for in-service month:														
Project Year*		13	14	15	16	17	18	19	20	21	22	23	24	25
		March 31, 2030 to March 30, 2031	March 31, 2031 to March 30, 2032	March 31, 2032 to March 30, 2033	March 31, 2033 to March 30, 2034	March 31, 2034 to March 30, 2035	March 31, 2035 to March 30, 2036	March 31, 2036 to March 30, 2037	March 31, 2037 to March 30, 2038	March 31, 2038 to March 30, 2039	March 31, 2039 to March 30, 2040	March 31, 2040 to March 30, 2041	March 31, 2041 to March 30, 2042	March 31, 2042 to March 30, 2043
Load in excess of capacity, project-year basis	MW	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6

Table 25: Line Pool Capital Contribution Calculation: Hydro One Distribution (Non 5+ MW ST)

Date: 23-Jun-19 Project #: 17503		SUMMARY OF CONTRIBUTION CALCULATIONS Line Pool - Estimated cost																									hydro one	
Facility Name: Supply to Essex County Transmission Reinforcement																												
Description: Line Pool Capital Contribution																												
Customer: Hydro One Distribution																												
Month Year	In-Service Date		Project year ended - annualized from In-Service Date																									
	Jun-30 2018	Jun-30 2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043		
Revenue & Expense Forecast																												
Load Forecast (MW)	0.0	0.2	1.0	2.7	3.1	3.2	3.6	3.7	4.1	4.2	4.5	4.7	5.0	5.2	5.5	5.7	6.0	6.1	6.5	6.6	6.9	7.1	7.4	7.5	7.8	7.8		
Load adjustments (MW)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Tariff Applied (\$/M/Month)	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87		
Incremental Revenue - \$k	0.0	0.0	2.6	10.9	28.7	32.1	33.8	37.2	38.9	42.3	44.0	47.4	49.1	52.5	54.1	57.5	59.1	62.5	64.1	67.5	69.0	72.3	73.8	77.1	78.5	81.4		
Removal Costs - \$k	0.0																											
On-going O&M&A Costs - \$k	0.0	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)		
Municipal Tax - \$k	0.0	(1.9)	(1.9)	(1.9)	(1.9)	(1.9)	(1.9)	(1.9)	(1.9)	(1.9)	(1.9)	(1.9)	(1.9)	(1.9)	(1.9)	(1.9)	(1.9)	(1.9)	(1.9)	(1.9)	(1.9)	(1.9)	(1.9)	(1.9)	(1.9)	(1.9)		
Net Revenue/(Costs) before taxes - \$k	0.0	(2.3)	0.3	8.6	26.4	29.9	31.5	35.0	36.6	40.1	41.7	45.2	46.8	50.2	51.9	55.3	56.9	60.3	61.8	65.2	66.7	70.1	71.6	74.9	76.2	79.1		
Income Taxes - \$k	0.0	4.4	7.2	4.4	(0.8)	(2.3)	(3.1)	(4.5)	(5.3)	(6.6)	(7.3)	(8.5)	(9.2)	(10.4)	(11.1)	(12.2)	(12.8)	(13.9)	(14.5)	(15.5)	(16.1)	(17.1)	(17.6)	(18.6)	(19.0)			
Operating Cash Flow (after taxes) - \$k	0.0	2.1	7.5	13.0	25.6	27.6	28.4	30.5	31.3	33.5	34.4	36.6	37.6	39.8	40.8	43.1	44.1	46.4	47.4	49.7	50.7	53.0	54.0	56.3	57.2			
PV Operating Cash Flow (after taxes) - \$k (A)	5.78%	432.3	2.1	6.9	11.3	21.0	21.4	20.8	21.2	20.6	20.8	20.2	20.3	19.7	19.7	19.1	18.5	18.4	17.7	17.6	17.0	16.8	16.1	15.0	15.3	15.0		
Capital Expenditures - \$k																												
Capital cost before overheads & AFUDC - \$k		(449.6)																										
- Overheads - \$k		0.0																										
- AFUDC - \$k		(449.6)																										
Total upfront capital expenditures - \$k		(449.6)																										
On-going capital expenditures - \$k		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
PV On-going capital expenditures - \$k		0.0																										
Total capital expenditures - \$k		(449.6)																										
PV CCA Residual Tax Shield - \$k		1.8																										
PV Working Capital - \$k		0.0																										
PV Capital (after taxes) - \$k (B)		(447.8)	(447.8)																									
Cumulative PV Cash Flow (after taxes) - \$k (A) + (B)		(15.5)	(447.8)	(445.7)	(438.9)	(427.6)	(406.5)	(385.1)	(364.3)	(343.1)	(322.5)	(301.7)	(281.5)	(261.2)	(241.5)	(221.8)	(202.7)	(183.6)	(165.1)	(146.8)	(129.1)	(111.5)	(94.5)	(77.8)	(61.6)	(45.7)	(30.4)	(15.5)

Discounted Cash Flow Summary			
Economic Study Horizon - Years:	25		
Discount Rate - %	5.78%		
	Before Cont \$k	After Cont \$k	Impact \$k
PV Incremental Revenue	546.2	546.2	
PV O&M&A Costs	(5.1)	(5.1)	
PV Municipal Tax	(25.3)	(25.3)	
PV Income Taxes	(136.7)	(136.7)	
PV CCA Tax Shield	55.0		52.8
PV Capital - Upfront	(449.6)	(449.6)	(2.2)
Add: PV Capital Contribution	0.0	(449.6)	17.6
PV Capital - On-going	0.0	0.0	0.0
PV Working Capital	0.0	0.0	0.0
PV Surplus / (Shortfall)	(15.5)	0.0	15.5
Profitability Index*	1.0	1.0	

Capital Contributions			
	Date	PV of Cont \$k	Previous Cont Payments \$k
Initial economic evaluation	2018	17.6	
Total		17.6	0.0
Contribution Required (before HST)			17.6
HST @ 13%			2.3
Contribution Required (including HST)†			19.9

Other Assumptions		Notes:
In-Service Date:	30-Jun-18	
Municipal Tax	0.42%	Transmission system average
Federal Income Tax	15.00%	2016 federal corporate income tax
Ontario Corporation Income Tax	11.50%	2016 provincial corporate income tax
Working cash net lag days	-1.04	As per Lead Lag Study as prepared by Navigant for 2015/2016 rates
CCA Rate for Class 47 Assets	8%	100% Class 47 assets except for Land

Notes:
 * PV of total cash flow, excluding net capital expenditure & on-going capital & proceeds on disposal / PV of net capital expenditure & on-going capital & proceeds on disposal
 † Payment from customer must include HST.

Calculation Time Stamp: 23-Jun-19, 10:42 AM

Table 26: Line Pool Capital Contribution Calculation: Hydro One Dx ST Customers - 5+ MW Consistent Monthly Peak



Date: 10-Jul-19 Project #: 17503		SUMMARY OF CONTRIBUTION CALCULATIONS Line Pool - Estimated cost																							
Facility Name: Supply to Essex County Transmission Reinforcement Description: Line Pool Capital Contribution Customer: Hydro One Dx ST Customers - 5+ MW Consistent Monthly Peak																									
Month Year	In-Service Date		Project year ended - annualized from In-Service Date																						
	Jun-30 2018	Jun-30 2019	Jun-30 2020	Jun-30 2021	Jun-30 2022	Jun-30 2023	Jun-30 2024	Jun-30 2025	Jun-30 2026	Jun-30 2027	Jun-30 2028	Jun-30 2029	Jun-30 2030	Jun-30 2031	Jun-30 2032	Jun-30 2033	Jun-30 2034	Jun-30 2035	Jun-30 2036	Jun-30 2037	Jun-30 2038	Jun-30 2039	Jun-30 2040		
				1st rise-up		2nd rise-up																			
Revenue & Expense Forecast																									
Load Forecast (MW)		99.5	215.9	260.1	283.9	283.9	283.9	283.9	283.9	283.9	284.0	284.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Load adjustments (MW)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tariff Applied (\$/M/Month)		99.5	215.9	260.1	283.9	283.9	283.9	283.9	283.9	284.0	284.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incremental Revenue - \$k		1,039.0	2,253.9	2,715.7	2,963.4	2,963.7	2,963.9	2,964.2	2,964.4	2,964.7	2,964.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Removal Costs - \$k		0.0																							
On-going O&M&A Costs - \$k		0.0	(11.2)	(11.2)	(11.2)	(11.2)	(11.2)	(11.2)	(11.2)	(11.2)	(11.2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Municipal Tax - \$k		0.0	(55.3)	(55.3)	(55.3)	(55.3)	(55.3)	(55.3)	(55.3)	(55.3)	(55.3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Revenue/(Costs) before taxes - \$k		0.0	972.6	2,187.4	2,649.2	2,896.9	2,897.2	2,897.4	2,897.7	2,898.0	2,898.2	2,898.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Income Taxes - \$k		0.0	(146.4)	(366.0)	(505.5)	(566.8)	(601.4)	(614.7)	(627.1)	(636.4)	(648.8)	(658.4)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Operating Cash Flow (after taxes) - \$k		0.0	826.1	1,821.4	2,143.7	2,330.1	2,295.8	2,282.7	2,270.6	2,259.6	2,249.4	2,240.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV Operating Cash Flow (after taxes) - \$k	(A)	5.78%	15,466.4	803.3	1,674.3	1,863.0	1,897.9	1,783.2	1,676.1	1,576.2	1,482.9	1,395.6	1,313.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital Expenditures - \$k																									
Capital cost before overheads & AFUDC - \$k			(13,206.7)																						
- Overheads - \$k			0.0																						
- AFUDC - \$k			0.0																						
Total upfront capital expenditures - \$k			(13,206.7)																						
On-going capital expenditures - \$k			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV On-going capital expenditures - \$k			0.0																						
Total capital expenditures - \$k			(13,206.7)																						
PV CCA Residual Tax Shield - \$k			417.7																						
PV Working Capital - \$k			0.0																						
PV Capital (after taxes) - \$k	(B)		(12,789.0)																						
Cumulative PV Cash Flow (after taxes) - \$k (A) + (B)			2,677.3	(11,985.8)	(10,311.5)	(8,448.5)	(6,550.6)	(4,767.5)	(3,091.3)	(1,515.1)	(32.2)	1,363.4	2,677.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Discounted Cash Flow Summary		Other Assumptions		Notes:	
Economic Study Horizon - Years:	10	In-Service Date:	30-Jun-18		
Discount Rate - %:	5.78%	Municipal Tax:	0.42%	Transmission system average	
		Federal Income Tax:	15.00%	2016 federal corporate income tax	
		Ontario Corporation Income Tax:	11.50%	2016 provincial corporate income tax	
		Working cash net lag days:	-1.04	As per Lead Lag Study as prepared by Navigant for 2015/2016 rates	
		CCA Rate for Class 47 Assets:	8%	100% Class 47 assets except for Land	

Economic Study Summary	
PV Incremental Revenue	19,936.5
PV O&M&A Costs	(85.6)
PV Municipal Tax	(422.9)
PV Income Taxes	(5,148.4)
PV CCA Tax Shield	1,604.4
PV Capital - Upfront	(13,206.7)
Add: PV Capital Contribution	0.0
PV Capital - On-going	0.0
PV Working Capital	0.0
PV Surplus / (Shortfall)	2,677.3
Profitability Index*	1.2

Notes:
PV of total cash flow, excluding net capital expenditure & on-going capital & proceeds on disposal / PV of net capital expenditure & on-going capital & proceeds on disposal

Calculation Time Stamp: 10-Jul-19, 9:36 AM

Table 27: Line Pool Capital Contribution Calculation: Hydro One Dx ST Customers - 5+ MW Fluctuating Monthly Peak



Date: 10-Jul-19 Project #: 17503		SUMMARY OF CONTRIBUTION CALCULATIONS Line Pool - Estimated cost														
Facility Name: Supply to Essex County Transmission Reinforcement Description: Line Pool Capital Contribution Customer: ST Customers 5+ MW Fluctuating Monthly Peak																
		In-Service														
		Date										Project year ended - annualized from In-Service Date				
		Month	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30
		Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
			0	1	2	3	4	5	6	7	8	9	10			
						1st Year-up		2nd Year-up								3rd Year-up
Revenue & Expense Forecast																
Load Forecast (MW) 33.3 72.3 87.1 95.1 95.1 95.1 95.1 95.1 95.1 95.1 95.1 95.1 95.1 95.1 95.1 95.1																
Load adjustments (MW) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0																
Tariff Applied (\$/M/Month) 33.3 72.3 87.1 95.1 95.1 95.1 95.1 95.1 95.1 95.1 95.1 95.1 95.1 95.1 95.1 95.1																
Incremental Revenue - \$k 348.0 754.9 909.5 992.5 992.6 992.7 992.8 992.9 992.9 993.0 993.0 993.0 993.0 993.0 993.0 993.0																
Removal Costs - \$k 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0																
On-going O&M&A Costs - \$k 0.0 (6.5) (6.5) (6.5) (6.5) (6.5) (6.5) (6.5) (6.5) (6.5) (6.5) (6.5) (6.5) (6.5) (6.5) (6.5)																
Municipal Tax - \$k 0.0 (27.2) (27.2) (27.2) (27.2) (27.2) (27.2) (27.2) (27.2) (27.2) (27.2) (27.2) (27.2) (27.2) (27.2) (27.2)																
Net Revenue/(Costs) before taxes - \$k 0.0 315.3 722.1 876.8 959.8 959.8 960.0 960.0 960.1 960.2 960.3 960.3 960.3 960.3 960.3 960.3																
Income Taxes - \$k 0.0 (28.7) (86.1) (135.5) (165.3) (172.4) (178.0) (185.0) (190.6) (195.7) (200.5) (205.0) (209.5) (214.0) (218.5) (223.0)																
Operating Cash Flow (after taxes) - \$k 0.0 286.5 636.0 741.3 794.5 787.5 781.0 775.0 768.5 764.5 759.8 755.3 750.8 746.3 741.8 737.3																
Cumulative PV @ 5.78%																
PV Operating Cash Flow (after taxes) - \$k (A) 5,308.2 0.0 278.6 584.6 644.2 652.7 611.6 573.4 538.0 505.0 474.3 445.7 0.0 0.0 0.0 0.0 0.0																
Capital Expenditures - \$k																
Capital cost before overheads & AFUDC - \$k (6,504.8)																
Overheads - \$k 0.0																
AFUDC - \$k 0.0																
Total upfront capital expenditures - \$k (6,504.8)																
On-going capital expenditures - \$k 0.0																
PV On-going capital expenditures - \$k 0.0																
Total capital expenditures - \$k (6,504.8)																
PV CCA Residual Tax Shield - \$k 205.7																
PV Working Capital - \$k 0.0																
PV Capital (after taxes) - \$k (B) (6,299.1)																
Cumulative PV Cash Flow (after taxes) - \$k (A) + (B) (990.9) (6,020.5) (5,435.9) (4,791.6) (4,138.9) (3,527.3) (2,953.8) (2,415.8) (1,910.8) (1,436.5) (990.9) 0.0 0.0 0.0 0.0 0.0 0.0																

Discounted Cash Flow Summary			
Economic Study Horizon - Years:	10		
Discount Rate - %	5.78%		
	Before Cont	After Cont	Impact
	\$k	\$k	\$k
PV Incremental Revenue	6,677.3	6,677.3	
PV O&M&A Costs	(42.2)	(42.2)	
PV Municipal Tax	(205.3)	(205.3)	
PV Income Taxes	(1,703.1)	(1,703.1)	0.0
PV CCA Tax Shield	790.2	653.2	(137.0)
PV Capital - Upfront	(6,504.8)	(6,504.8)	
Add PV Capital Contribution	0.0	(6,504.8)	1,127.9
PV Capital - On-going	0.0	0.0	1,127.9
PV Working Capital	0.0	0.0	
PV Surplus / (Shortfall)	(990.9)	0.0	990.9
Profitability Index ¹	0.8	1.0	

Capital Contributions			
	Date	PV of Cont \$k	Current Cont / (Credit) \$k
Initial economic evaluation	2018	1,127.9	1,127.9
Total		1,127.9	1,127.9
Contribution Required (before HST)			1,127.9
HST @ 13%			146.6
Contribution Required (including HST)¹			1,274.5

Other Assumptions		Notes:
In-Service Date:	30-Jun-18	
Municipal Tax	0.42%	Transmission system average
Federal Income Tax	15.00%	2016 federal corporate income tax
Ontario Corporation Income Tax	11.50%	2016 provincial corporate income tax
Working cash net lag days	-1.04	As per Lead Lag Study as prepared by Navigator for 2015/2016 rates
CCA Rate for Class 47 Assets	8%	100% Class 47 assets except for Land

Notes:
¹ Payment from customer must include HST.

Calculation Time Stamp: 10-Jul-19, 9:44 AM

Table 28: Line Pool Capital Contribution Calculation: Essex Powerlines



Date: 23-Jun-19		SUMMARY OF CONTRIBUTION CALCULATIONS																										
Project #: 17503		Line Pool - Estimated cost																										
Facility Name: Supply to Essex County Transmission Reinforcement																												
Description: Line Pool Capital Contribution																												
Customer: Essex Powerlines																												
Month	Year	Project year ended - annualized from In-Service Date																										
		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
Revenue & Expense Forecast																												
Load Forecast (MW)		2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	
Load adjustments (MW)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tariff Applied (\$/M/Month)		0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	
Incremental Revenue - \$k		20.9	20.6	20.4	20.1	19.9	19.7	19.4	19.2	19.0	18.8	18.6	18.5	18.3	18.1	18.0	17.8	17.7	17.5	17.4	17.2	17.1	17.0	16.8	16.7	16.5	16.5	
Removal Costs - \$k		0.0																										
On-going O&M&A Costs - \$k		0.0	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	
Municipal Tax - \$k		0.0	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	
Net Revenue/(Costs) before taxes - \$k		0.0	20.2	19.9	19.7	19.4	19.2	19.0	18.7	18.5	18.3	18.1	17.9	17.8	17.6	17.4	17.3	17.1	17.0	16.8	16.7	16.5	16.4	16.3	16.1	16.0	15.8	
Income Taxes - \$k		0.0	(4.2)	(3.0)	(3.1)	(3.2)	(3.3)	(3.4)	(3.5)	(3.5)	(3.6)	(3.7)	(3.7)	(3.7)	(3.6)	(3.6)	(3.6)	(3.6)	(3.6)	(3.6)	(3.6)	(3.6)	(3.6)	(3.6)	(3.6)	(3.6)	(3.6)	
Operating Cash Flow (after taxes) - \$k		0.0	16.0	16.9	16.6	16.2	15.9	15.6	15.3	15.0	14.7	14.5	14.3	14.0	13.8	13.6	13.5	13.3	13.1	12.9	12.8	12.6	12.4	12.2	12.1	12.0	11.8	
Cumulative PV @ 5.78%		196.8																										
PV Operating Cash Flow (after taxes) - \$k (A)		196.8	0.0	15.6	15.5	14.4	13.3	12.3	11.4	10.6	9.8	9.1	8.5	7.9	7.4	6.9	6.4	6.0	5.6	5.2	4.8	4.5	4.2	4.0	3.7	3.5	3.2	3.0
Capital Expenditures - \$k																												
Capital cost before overheads & AFUDC - \$k		(139.1)																										
- Overheads - \$k		0.0																										
- AFUDC - \$k		0.0																										
Total upfront capital expenditures - \$k		(139.1)																										
On-going capital expenditures - \$k		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PV On-going capital expenditures - \$k		0.0																										
Total capital expenditures - \$k		(139.1)																										
PV CCA Residual Tax Shield - \$k		0.5																										
PV Working Capital - \$k		0.0																										
PV Capital (after taxes) - \$k (B)		(138.6)	(138.6)																									
Cumulative PV Cash Flow (after taxes) - \$k (A) + (B)		58.2	(138.6)	(123.0)	(107.4)	(93.1)	(79.8)	(67.5)	(56.0)	(45.4)	(35.6)	(26.5)	(18.0)	(10.1)	(2.7)	4.1	10.5	16.5	22.0	27.2	32.1	36.6	40.8	44.8	48.5	52.0	55.2	58.2

Discounted Cash Flow Summary		Other Assumptions		Notes:	
Economic Study Horizon - Years:	25	In-Service Date:	30-Jun-18		
Discount Rate - %	5.78%	Municipal Tax	0.42%	Transmission system average	
		Federal Income Tax	15.00%	2016 federal corporate income tax	
		Ontario Corporation Income Tax	11.50%	2016 provincial corporate income tax	
		Working cash net lag days	-1.04	As per Lead Lag Study as prepared by Navigant for 2015/2016 rates	
		CCA Rate for Class 47 Assets	8%	100% Class 47 assets except for Land	
Calculation Time Stamp: 23-Jun-19, 10:24 AM					

Economic Study Summary	
PV Incremental Revenue	254.7
PV O&M&A Costs	(11.6)
PV Municipal Tax	(7.8)
PV Income Taxes	(65.0)
PV CCA Tax Shield	17.0
PV Capital - Upfront	(139.1)
Add: PV Capital Contribution	(139.1)
PV Capital - On-going	0.0
PV Working Capital	0.0
PV Surplus / (Shortfall)	58.2
Profitability Index*	1.4

Notes:
 *PV of total cash flow, excluding net capital expenditure & on-going capital & proceeds on disposal / PV of net capital expenditure & on-going capital & proceeds on disposal

Table 29: Line Pool Capital Contribution Calculation: E.L.K.

Date: 23-Jun-19 Project #: 17593		SUMMARY OF CONTRIBUTION CALCULATIONS Line Pool - Estimated cost																											
Facility Name: Supply to Essex County Transmission Reinforcement																													
Description: Line Pool Capital Contribution																													
Customer: ELK																													
In-Service		Project year ended - annualized from In-Service Date																											
Month	Date	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	
Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25		
Revenue & Expense Forecast																													
Load Forecast (MW)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Load adjustments (MW)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tariff Applied (\$/KW/Month)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Incremental Revenue - \$k		0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Removal Costs - \$k		41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
On-going O&M&A Costs - \$k		0.0	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)
Municipal Tax - \$k		0.0	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)
Net Revenue/(Costs) before taxes - \$k		0.0	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1
Income Taxes - \$k		0.0	(9.6)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)
Operating Cash Flow (after taxes) - \$k		0.0	31.5	33.4	33.1	32.8	32.6	32.3	32.1	31.9	31.7	31.5	31.3	31.2	31.1	30.9	30.8	30.7	30.6	30.5	30.4	30.4	30.3	30.2	30.2	30.2	30.1	30.1	30.1
PV Operating Cash Flow (after taxes) - \$k (A)		0.0	30.7	30.7	28.8	27.0	25.3	23.7	22.3	20.9	19.7	18.5	17.4	16.4	15.4	14.5	13.6	12.9	12.1	11.4	10.8	10.2	9.6	9.0	8.5	8.0	7.8	7.8	
Capital Expenditures - \$k																													
Capital cost before overheads & AFUDC - \$k		(244.7)																											
- Overheads - \$k		0.0																											
- AFUDC - \$k		0.0																											
Total upfront capital expenditures - \$k		(244.7)																											
On-going capital expenditures - \$k		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PV On-going capital expenditures - \$k		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total capital expenditures - \$k		(244.7)																											
PV CCA Residual Tax Shield - \$k		1.0																											
PV Working Capital - \$k		0.0																											
PV Capital (after taxes) - \$k (B)		(243.7)																											
Cumulative PV Cash Flow (after taxes) - \$k (A) + (B)		181.1	(243.7)	(213.1)	(182.3)	(153.6)	(126.6)	(101.3)	(77.6)	(55.3)	(34.4)	(14.8)	3.7	21.1	37.4	52.8	67.3	81.0	93.8	106.0	117.4	128.1	138.3	147.9	156.9	165.4	173.5	181.1	

Discounted Cash Flow Summary		Other Assumptions		Notes:	
Economic Study Horizon - Years:	25	In-Service Date:	30-Jun-18		
Discount Rate - %:	5.78%	Municipal Tax:	0.42%	Transmission system average	
		Federal Income Tax:	15.00%	2016 federal corporate income tax	
		Ontario Corporation Income Tax:	11.50%	2016 provincial corporate income tax	
		Working cash net lag days:	-1.04	As per Lead Lag Study as prepared by Navigant for 2015/2016 rates	
		CCA Rate for Class 47 Assets:	8%	100% Class 47 assets except for Land	

PV Incremental Revenue	555.1
PV O&M&A Costs	(2.9)
PV Municipal Tax	(113.9)
PV Income Taxes	(142.7)
PV CCA Tax Shield	29.9
PV Capital - Upfront	(244.7)
Add: PV Capital Contribution	(244.7)
PV Capital - On-going	0.0
PV Working Capital	0.0
PV Surplus / (Shortfall)	181.1
Profitability Index*	1.7

Notes:
PV of total cash flow, excluding net capital expenditure & on-going capital & proceeds on disposal / PV of net capital expenditure & on-going capital & proceeds on disposal

Calculation Time Stamp: 23-Jun-19, 10:18 AM

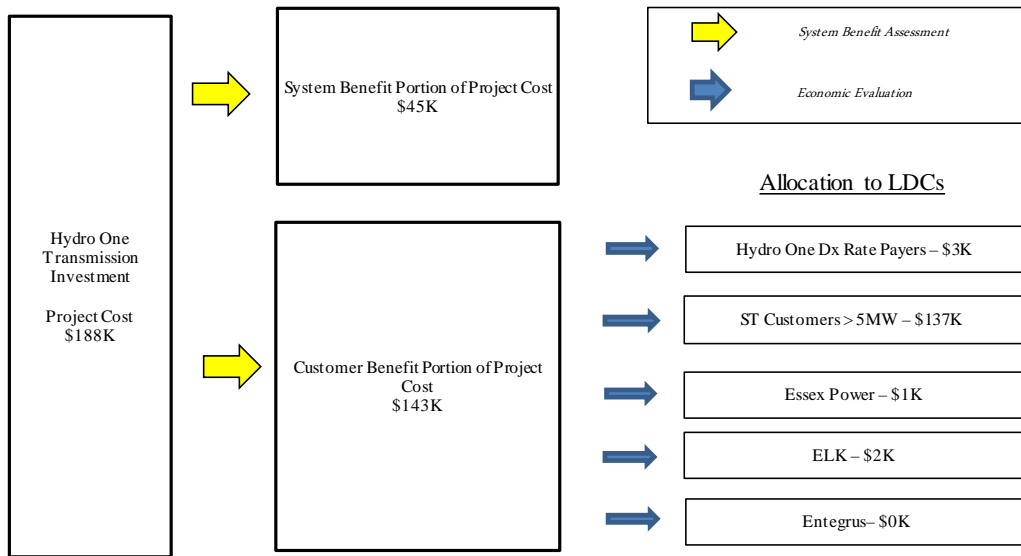


Table 30: Line Pool Capital Contribution Calculation: Entegrus



Date: 23-Jun-19 Project #: 17503		SUMMARY OF CONTRIBUTION CALCULATIONS Line Pool - Estimated cost																									
Facility Name: Supply to Essex County Transmission Reinforcement																											
Description: Line Pool Capital Contribution																											
Customer: Entegrus																											
Month	Year	In-Service Date																									
		Jun-30 2018	Jun-30 2019	Jun-30 2020	Jun-30 2021	Jun-30 2022	Jun-30 2023	Jun-30 2024	Jun-30 2025	Jun-30 2026	Jun-30 2027	Jun-30 2028	Jun-30 2029	Jun-30 2030	Jun-30 2031	Jun-30 2032	Jun-30 2033	Jun-30 2034	Jun-30 2035	Jun-30 2036	Jun-30 2037	Jun-30 2038	Jun-30 2039	Jun-30 2040	Jun-30 2041	Jun-30 2042	Jun-30 2043
Revenue & Expense Forecast																											
Load Forecast (MW)		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
Load adjustments (MW)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tariff Applied (\$/kW/Month)		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
Incremental Revenue - \$k		0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	
Removal Costs - \$k		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
On-going O&M&A Costs - \$k		0.0	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	
Municipal Tax - \$k		0.0	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	
Net Revenue/(Costs) before taxes - \$k		0.0	3.3	3.3	2.8	3.0	3.1	3.3	3.4	3.6	3.8	3.9	4.1	4.2	4.4	4.6	4.7	4.9	5.1	5.2	5.4	5.6	5.8	5.9	6.1	6.3	
Income Taxes - \$k		0.0	(0.5)	(0.2)	(0.2)	(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	(0.6)	(0.7)	(0.8)	(0.9)	(1.0)	(1.0)	(1.1)	(1.2)	(1.2)	(1.3)	(1.3)	(1.4)	(1.4)	(1.5)	(1.6)	(1.6)	
Operating Cash Flow (after taxes) - \$k		0.0	2.8	3.1	2.7	2.7	2.8	2.9	3.0	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.4	4.5	4.6	4.7	
Cumulative PV @ 5.78%		45.0	2.7	2.8	2.3	2.3	2.2	2.1	2.1	2.0	1.9	1.9	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.2	
PV Operating Cash Flow (after taxes) - \$k (A)		0.0	2.7	2.8	2.3	2.3	2.2	2.1	2.1	2.0	1.9	1.9	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.2	
Capital Expenditures - \$k																											
Capital cost before overheads & AFUDC - \$k		(40.2)																									
- Overheads - \$k		0.0																									
- AFUDC - \$k		0.0																									
Total upfront capital expenditures - \$k		(40.2)																									
On-going capital expenditures - \$k		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
PV On-going capital expenditures - \$k		0.0																									
Total capital expenditures - \$k		(40.2)																									
PV CCA Residual Tax Shield - \$k		0.2																									
PV Working Capital - \$k		0.0																									
PV Capital (after taxes) - \$k (B)		(40.0)																									
Cumulative PV Cash Flow (after taxes) - \$k (A) + (B)		4.9	(37.4)	(34.5)	(32.2)	(30.0)	(27.8)	(25.7)	(23.6)	(21.6)	(19.7)	(17.8)	(15.9)	(14.2)	(12.4)	(10.7)	(9.1)	(7.5)	(6.0)	(4.5)	(3.0)	(1.6)	(0.2)	1.1	2.4	3.7	4.9
Discounted Cash Flow Summary																											
Economic Study Horizon - Years:		25																									
Discount Rate - %:		5.78%																									
Sk																											
PV Incremental Revenue		57.4																									
PV O&M&A Costs		(0.5)																									
PV Municipal Tax		(2.3)																									
PV Income Taxes		(14.5)																									
PV CCA Tax Shield		4.9																									
PV Capital - Upfront		(40.2)																									
Add: PV Capital Contribution		0.0																									
PV Capital - On-going		0.0																									
PV Working Capital		0.0																									
PV Surplus / (Shortfall)		4.9																									
Profitability Index*		1.1																									
Notes:		PV of total cash flow, excluding net capital expenditure & on-going capital & proceeds on disposal / PV of net capital expenditure & on-going capital & proceeds on disposal																									
Other Assumptions																											
Notes:																											
In-Service Date:		30-Jun-18																									
Municipal Tax:		0.42% Transmission system average																									
Federal Income Tax:		15.00% 2016 federal corporate income tax																									
Ontario Corporation Income Tax:		11.50% 2016 provincial corporate income tax																									
Working cash net lag days:		-1.04 As per Lead Lag Study as prepared by Navigant for 2015/2016 rates																									
CCA Rate for Class 47 Assets:		8% 100% Class 47 assets except for Land																									
Calculation Time Stamp:		23-Jun-19, 10:15 AM																									

Table 31: Network Pool Capital Contribution Summary



Distributor	Non-Coincident Incremental Peak Load (MW)	Cost Allocation Percentage based on Capacity Required (%)	Cost Allocation (\$K)	Capital Contribution Based on Economic Evaluation (\$M)
Hydro One Dx (Non 5+ MW ST)	72	2%	3	0
Hydro One Dx ST Customers - 5+ MW Consistent Monthly Peak	285	64%	92	0
Hydro One Dx ST Customers - 5+ MW Fluctuating Monthly Peak	140	32%	45	0
Essex Power	32	1%	1	0
ELK	31	1%	2	0
Entegrus	3	0%	0	0
TOTAL	564	100%	143	0

Table 32: Allocation of Network Project Costs (\$k)

Benefiting Customer	% Allocation of Contracted Capacity
Hydro One Dx (Non 5+ MW ST)	2.2%
Hydro One Dx ST Customers - 5+ MW Consistent Monthly Peak	64.2%
Hydro One Dx ST Customers - 5+ MW Fluctuating Monthly Peak	31.6%
Essex Powerlines	0.7%
ELK Hydro	1.2%
Entergus	0.2%
Total	100%

Allocation of Project Costs

Class 47 Project Expenditures Allocated Tx to Beneficiaries	\$	143.1
Total	\$	143.1

Benefiting Customer	% of Capacity	Line 47 Costs Allocated to Allocated to Beneficiaries	Total Expenditures Allocated to Allocated to Beneficiaries
Hydro One Dx (Non 5+ MW ST)	2.2%	\$ 3.1	\$ 3.1
Hydro One Dx ST Customers - 5+ MW Consistent Monthly Peak	64.2%	\$ 91.8	\$ 91.8
Hydro One Dx ST Customers - 5+ MW Fluctuating Monthly Peak	31.6%	\$ 45.2	\$ 45.2
Essex Powerlines	0.7%	\$ 1.0	\$ 1.0
ELK Hydro	1.2%	\$ 1.7	\$ 1.7
Entergus	0.2%	\$ 0.3	\$ 0.3
Total	100.0%	\$ 143.1	\$ 143.1

Table 33: Distributor Specific Load Forecasts, Allocation of Capacity & Incremental Load for Network Pool

Capacity as per EB-2014-0421

Kingsville 120

Post In-service Capacity

Kingsville 120

Leamington 550

Total Capacity 670

Minus Current 120

Incremental Capacity 550

	Historical Capacity requirement (As per EB-2014-0421)	% of Historical Capacity required	Allocation of Current Kingsville Contracted Capacity	Forecast Period Total Contracted Capacity (Peak Load)	Incremental Contracted Capacity	% of Utilized Incremental Capacity	Incremental Costs Assigned
Hydro One Dx (Non 5+ MW ST)	74.7	51.8%	62.2	71.9	9.7	2.2%	2.2%
Hydro One Dx ST Customers - 5+ MW Consistent Monthly Peak	-	0.0%	-	284.9	284.9	64.2%	64.2%
Hydro One Dx ST Customers - 5+ MW Fluctuating Monthly Peak	-	0.0%	-	140.3	140.3	31.6%	31.6%
Essex Powerlines	35.3	24.5%	29.4	32.4	3.0	0.7%	0.7%
ELK Hydro	31.5	21.8%	26.2	31.5	5.3	1.2%	1.2%
Entegrus	2.6	1.8%	2.2	3.1	0.9	0.2%	0.2%
	144.2	100%	120.00	564.03	444.03	100%	100%

Table 34: Derivation of Load used for Hydro One Distribution (Non 5+ MW ST) Network Pool

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Load Forecast	MW 64.8	62.4	62.8	65.5	66.0	66.1	66.6	66.7	67.2	67.3	67.8	67.9	68.4	
Allocation of Current Capacity	MW 62.2													
Incremental Load	MW 2.6	62.4	62.8	65.5	66.0	66.1	66.6	66.7	67.2	67.3	67.8	67.9	68.4	
PLI-adjustment	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	
PLI-adjusted load in excess of capacity	MW 2.1	50.5	50.9	53.0	53.4	53.5	53.9	54.0	54.4	54.5	54.9	55.0	55.4	
Adjusted for in-service month:														
Project Year*		1	2	3	4	5	6	7	8	9	10	11	12	
		March 31, 2018 to	March 31, 2019 to	March 31, 2020 to	March 31, 2021 to	March 31, 2022 to	March 31, 2023 to	March 31, 2024 to	March 31, 2025 to	March 31, 2026 to	March 31, 2027 to	March 31, 2028 to	March 31, 2029 to	
Load in excess of capacity, project-year basis	MW	March 30, 2019	March 30, 2020	March 30, 2021	March 30, 2022	March 30, 2023	March 30, 2024	March 30, 2025	March 30, 2026	March 30, 2027	March 30, 2028	March 30, 2029	March 30, 2030	
		14.2	50.6	51.4	53.1	53.5	53.6	53.9	54.1	54.4	54.6	54.9	55.1	
		2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Load Forecast	MW 68.5	69.0	69.1	69.6	69.7	70.2	70.2	70.7	70.8	71.3	71.4	71.8	71.9	
Allocation of Current Capacity	MW -	-	-	-	-	-	-	-	-	-	-	-	-	
Incremental Load	MW 68.5	69.0	69.1	69.6	69.7	70.2	70.2	70.7	70.8	71.3	71.4	71.8	71.9	
PLI-adjustment	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	
PLI-adjusted load in excess of capacity	MW 55.5	55.9	55.9	56.4	56.4	56.8	56.9	57.3	57.4	57.8	57.8	58.2	58.2	
Adjusted for in-service month:														
Project Year*		13	14	15	16	17	18	19	20	21	22	23	24	25
		March 31, 2030 to	March 31, 2031 to	March 31, 2032 to	March 31, 2033 to	March 31, 2034 to	March 31, 2035 to	March 31, 2036 to	March 31, 2037 to	March 31, 2038 to	March 31, 2039 to	March 31, 2040 to	March 31, 2041 to	March 31, 2042 to
Load in excess of capacity, project-year basis	MW	March 30, 2031	March 30, 2032	March 30, 2033	March 30, 2034	March 30, 2035	March 30, 2036	March 30, 2037	March 30, 2038	March 30, 2039	March 30, 2040	March 30, 2041	March 30, 2042	March 30, 2043
		55.4	55.6	55.9	56.0	56.4	56.5	56.8	57.0	57.3	57.5	57.8	57.9	58.2

Table 35: Derivation of Load used for Hydro One Dx ST Customers - 5+ MW Consistent Monthly Peak Network Pool

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Load Forecast	MW 64.8	203.8	252.2	283.8	283.9	283.9	283.9	283.9	284.0	284.0	284.0	284.0	284.1	
Allocation of Current Capacity	MW -	-	-	-	-	-	-	-	-	-	-	-	-	
Incremental Load	MW 64.8	203.8	252.2	283.8	283.9	283.9	283.9	283.9	284.0	284.0	284.0	284.0	284.1	
PLI-adjustment	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
PLI-adjusted load in excess of capacity	MW 64.8	203.8	252.2	283.8	283.9	283.9	283.9	283.9	284.0	284.0	284.0	284.0	284.1	
Adjusted for in-service month:														
Project Year*		1	2	3	4	5	6	7	8	9	10	11	12	
		March 31, 2018 to	March 31, 2019 to	March 31, 2020 to	March 31, 2021 to	March 31, 2022 to	March 31, 2023 to	March 31, 2024 to	March 31, 2025 to	March 31, 2026 to	March 31, 2027 to	March 31, 2028 to	March 31, 2029 to	
Load in excess of capacity, project-year basis	MW	March 30, 2019	March 30, 2020	March 30, 2021	March 30, 2022	March 30, 2023	March 30, 2024	March 30, 2025	March 30, 2026	March 30, 2027	March 30, 2028	March 30, 2029	March 30, 2030	
		99.5	215.9	260.1	283.9	283.9	283.9	283.9	283.9	284.0	284.0	284.0	284.0	
		2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Load Forecast	MW 284.1	284.1	284.1	284.2	284.2	284.2	284.2	284.2	284.3	284.3	284.3	284.3	284.9	
Allocation of Current Capacity	MW -	-	-	-	-	-	-	-	-	-	-	-	-	
Incremental Load	MW 284.1	284.1	284.1	284.2	284.2	284.2	284.2	284.2	284.3	284.3	284.3	284.3	284.9	
PLI-adjustment	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
PLI-adjusted load in excess of capacity	MW 284.1	284.1	284.1	284.2	284.2	284.2	284.2	284.2	284.3	284.3	284.3	284.3	284.9	
Adjusted for in-service month:														
Project Year*		13	14	15	16	17	18	19	20	21	22	23	24	25
		March 31, 2030 to	March 31, 2031 to	March 31, 2032 to	March 31, 2033 to	March 31, 2034 to	March 31, 2035 to	March 31, 2036 to	March 31, 2037 to	March 31, 2038 to	March 31, 2039 to	March 31, 2040 to	March 31, 2041 to	March 31, 2042 to
Load in excess of capacity, project-year basis	MW	March 30, 2031	March 30, 2032	March 30, 2033	March 30, 2034	March 30, 2035	March 30, 2036	March 30, 2037	March 30, 2038	March 30, 2039	March 30, 2040	March 30, 2041	March 30, 2042	March 30, 2043
		284.1	284.1	284.1	284.1	284.2	284.2	284.2	284.2	284.2	284.3	284.3	284.3	284.4

Table 36: Derivation of Load used for Hydro One Dx ST Customers - 5+ MW Fluctuating Monthly Peak Network Pool

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Load Forecast	MW 31.9	100.4	124.2	139.8	139.8	139.8	139.8	139.9	139.9	139.9	139.9	139.9	139.9
Allocation of Current Capacity	MW												
Incremental Load	MW 31.9	100.4	124.2	139.8	139.8	139.8	139.8	139.9	139.9	139.9	139.9	139.9	139.9
PLI-adjustment	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%
PLI-adjusted load in excess of capacity	MW 21.7	68.3	84.5	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1
Adjusted for in-service month:													
Project Year*	1	2	3	4	5	6	7	8	9	10	11	12	
	March 31, 2018 to	March 31, 2019 to	March 31, 2020 to	March 31, 2021 to	March 31, 2022 to	March 31, 2023 to	March 31, 2024 to	March 31, 2025 to	March 31, 2026 to	March 31, 2027 to	March 31, 2028 to	March 31, 2029 to	March 31, 2030 to
Load in excess of capacity, project-year basis	MW	33.3	72.3	87.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1
	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Load Forecast	MW 139.9	139.9	139.9	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.3
Allocation of Current Capacity	MW												
Incremental Load	MW 139.9	139.9	139.9	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.3
PLI-adjustment	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%
PLI-adjusted load in excess of capacity	MW 95.1	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.4
Adjusted for in-service month:													
Project Year*	13	14	15	16	17	18	19	20	21	22	23	24	25
	March 31, 2030 to	March 31, 2031 to	March 31, 2032 to	March 31, 2033 to	March 31, 2034 to	March 31, 2035 to	March 31, 2036 to	March 31, 2037 to	March 31, 2038 to	March 31, 2039 to	March 31, 2040 to	March 31, 2041 to	March 31, 2042 to
Load in excess of capacity, project-year basis	MW 95.1	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.3

Table 37: Derivation of Load used for Essex Powerlines Network Pool

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Load Forecast	MW 32.4	32.4	32.3	32.3	32.3	32.2	32.2	32.2	32.1	32.1	32.1	32.1	32.0
Allocation of Current Capacity	MW												
Incremental Load	MW 3.0	3.0	2.9	2.9	2.9	2.8	2.8	2.8	2.7	2.7	2.7	2.6	2.6
PLI-adjustment	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%
PLI-adjusted load in excess of capacity	MW 2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8
Adjusted for in-service month:													
Project Year*	1	2	3	4	5	6	7	8	9	10	11	12	
	March 31, 2030 to	March 31, 2031 to	March 31, 2032 to	March 31, 2033 to	March 31, 2034 to	March 31, 2035 to	March 31, 2036 to	March 31, 2037 to	March 31, 2038 to	March 31, 2039 to	March 31, 2040 to	March 31, 2041 to	March 31, 2042 to
Load in excess of capacity, project-year basis	MW 2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8
	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Load Forecast	MW 32.0	32.0	32.0	31.9	31.9	31.9	31.9	31.9	31.8	31.8	31.8	31.8	31.8
Allocation of Current Capacity	MW												
Incremental Load	MW 2.6	2.6	2.6	2.5	2.5	2.5	2.5	2.4	2.4	2.4	2.4	2.4	2.4
PLI-adjustment	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%
PLI-adjusted load in excess of capacity	MW 1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6
Adjusted for in-service month:													
Project Year*	13	14	15	16	17	18	19	20	21	22	23	24	25
	March 31, 2030 to	March 31, 2031 to	March 31, 2032 to	March 31, 2033 to	March 31, 2034 to	March 31, 2035 to	March 31, 2036 to	March 31, 2037 to	March 31, 2038 to	March 31, 2039 to	March 31, 2040 to	March 31, 2041 to	March 31, 2042 to
Load in excess of capacity, project-year basis	MW 1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6

Table 38: Derivation of Load used for E.L.K. Network Pool

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Load Forecast	MW 31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	
Allocation of Current Capacity	MW 26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	
Incremental Load	MW 5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	
PLI-adjustment	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	
PLI-adjusted load in excess of capacity	MW 4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Adjusted for in-service month:														
Project Year*		1	2	3	4	5	6	7	8	9	10	11	12	
		March 31, 2018 to	March 31, 2019 to	March 31, 2020 to	March 31, 2021 to	March 31, 2022 to	March 31, 2023 to	March 31, 2024 to	March 31, 2025 to	March 31, 2026 to	March 31, 2027 to	March 31, 2028 to	March 31, 2029 to	
Load in excess of capacity, project-year basis	MW		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
		2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Load Forecast	MW 31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	
Allocation of Current Capacity	MW 26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	
Incremental Load	MW 5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	
PLI-adjustment	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	
PLI-adjusted load in excess of capacity	MW 4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Adjusted for in-service month:														
Project Year*		13	14	15	16	17	18	19	20	21	22	23	24	25
		March 31, 2030 to	March 31, 2031 to	March 31, 2032 to	March 31, 2033 to	March 31, 2034 to	March 31, 2035 to	March 31, 2036 to	March 31, 2037 to	March 31, 2038 to	March 31, 2039 to	March 31, 2040 to	March 31, 2041 to	March 31, 2042 to
Load in excess of capacity, project-year basis	MW	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Table 39: Derivation of Load used for Entegrus Network Pool

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Load Forecast	MW 2.6	2.7	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.8	2.8	
Allocation of Current Capacity	MW 2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
Incremental Load	MW 0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	
PLI-adjustment	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	
PLI-adjusted load in excess of capacity	MW 0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	
Adjusted for in-service month:														
Project Year*		1	2	3	4	5	6	7	8	9	10	11	12	
		March 31, 2018 to	March 31, 2019 to	March 31, 2020 to	March 31, 2021 to	March 31, 2022 to	March 31, 2023 to	March 31, 2024 to	March 31, 2025 to	March 31, 2026 to	March 31, 2027 to	March 31, 2028 to	March 31, 2029 to	
Load in excess of capacity, project-year basis	MW		0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	
		2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Load Forecast	MW 2.8	2.8	2.8	2.9	2.9	2.9	2.9	3.0	3.0	3.0	3.0	3.0	3.1	
Allocation of Current Capacity	MW 2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
Incremental Load	MW 0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.9	
PLI-adjustment	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	
PLI-adjusted load in excess of capacity	MW 0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7	
Adjusted for in-service month:														
Project Year*		13	14	15	16	17	18	19	20	21	22	23	24	25
		March 31, 2030 to	March 31, 2031 to	March 31, 2032 to	March 31, 2033 to	March 31, 2034 to	March 31, 2035 to	March 31, 2036 to	March 31, 2037 to	March 31, 2038 to	March 31, 2039 to	March 31, 2040 to	March 31, 2041 to	March 31, 2042 to
Load in excess of capacity, project-year basis	MW	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6

Table 40: Network Pool Capital Contribution Calculation: Hydro One Distribution (Non 5+ MW ST)

Date: 23-Jun-19 Project #: 17503		SUMMARY OF CONTRIBUTION CALCULATIONS Network Pool - Estimated cost																									hydro one		
Facility Name: Supply @ Essex County Transmission Reinforcement																													
Description: Network Pool Capital Contribution																													
Customer: Hydro One Distribution																													
	Month Year	In-Service Date																											
		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043		
		Project year ended - annualized from In-Service Date																											
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25		
Revenue & Expense Forecast																													
Load Forecast (MW)		0.0	0.2	1.0	2.7	3.1	3.2	3.6	3.7	4.1	4.2	4.5	4.7	5.0	5.2	5.5	5.7	6.0	6.1	6.5	6.6	6.9	7.1	7.4	7.5	7.8			
Load adjustments (MW)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Tariff Applied (\$/M/Month)		3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66			
Incremental Revenue - \$k		0.0	0.0	10.8	45.7	120.6	135.2	142.1	156.7	163.6	178.2	185.1	199.6	206.5	220.9	227.7	242.0	248.7	263.0	269.6	283.8	290.3	304.3	310.6	324.5	330.1	342.4		
Removal Costs - \$k		0.0																											
On-going O&M&A Costs - \$k		0.0	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)		
Municipal Tax - \$k		0.0	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)		
Net Revenue/(Costs) before taxes - \$k		0.0	(0.0)	10.8	45.7	120.6	135.1	142.1	156.7	163.6	178.1	185.1	199.6	206.4	220.9	227.7	242.0	248.7	263.0	269.6	283.8	290.3	304.3	310.6	324.5	330.1	342.3		
Income Taxes - \$k		0.0	0.0	(2.8)	(12.0)	(31.9)	(35.8)	(37.6)	(41.5)	(43.3)	(47.2)	(49.0)	(52.9)	(54.7)	(58.5)	(60.3)	(64.1)	(65.9)	(69.7)	(71.4)	(75.2)	(78.9)	(80.6)	(82.3)	(86.0)	(90.7)			
Operating Cash Flow (after taxes) - \$k		0.0	0.0	8.0	33.6	88.7	99.4	104.5	115.2	120.3	131.0	136.1	146.7	151.8	162.4	167.4	177.9	182.8	193.3	199.2	208.6	213.4	223.6	228.3	238.5	242.6	251.6		
PV Operating Cash Flow (after taxes) - \$k (A)	5.78%	1,689.2	0.0	0.0	7.3	29.2	72.9	77.2	76.7	90.0	79.0	81.3	79.8	81.4	79.6	80.5	78.4	78.8	76.6	76.5	74.2	73.8	71.4	70.7	68.3	67.4	64.8	63.6	
Capital Expenditures - \$k																													
Capital cost before overheads & AFUDC - \$k			(3.1)																										
Overheads - \$k			0.0																										
- AFUDC - \$k			0.0																										
Total upfront capital expenditures - \$k			(3.1)																										
On-going capital expenditures - \$k			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
PV On-going capital expenditures - \$k			0.0																										
Total capital expenditures - \$k			(3.1)																										
PV CCA Residual Tax Shield - \$k			0.0																										
PV Working Capital - \$k			0.0																										
PV Capital (after taxes) - \$k (B)			(3.1)																										
Cumulative PV Cash Flow (after taxes) - \$k (A) + (B)			1,686.1	(3.1)	(3.1)	4.3	33.5	106.4	183.6	260.3	340.2	419.2	500.5	580.3	661.6	741.2	821.6	900.1	978.9	1,055.4	1,132.0	1,206.1	1,279.9	1,351.3	1,422.0	1,490.3	1,557.7	1,622.6	1,686.1
Discounted Cash Flow Summary																													
Economic Study Horizon - Years:	25																												
Discount Rate - %	5.78%																												
	\$k																												
PV Incremental Revenue	2,297.8																												
PV O&M&A Costs	(0.0)																												
PV Municipal Tax	(0.2)																												
PV Income Taxes	(606.9)																												
PV CCA Tax Shield	0.5																												
PV Capital - Upfront	(3.1)																												
Add: PV Capital Contribution	0.0	(3.1)																											
PV Capital - On-going	0.0																												
PV Working Capital	0.0																												
PV Surplus / (Shortfall)	1,686.1																												
Profitability Index*	540.6																												
Notes:	PV of total cash flow, excluding net capital expenditure & on-going capital & proceeds on disposal / PV of net capital expenditure & on-going capital & proceeds on disposal																												
Other Assumptions		Notes:																											
In-Service Date:	30-Jun-18																												
Municipal Tax:	0.42%	Transmission system average																											
Federal Income Tax:	15.00%	2016 federal corporate income tax																											
Ontario Corporation Income Tax:	11.50%	2016 provincial corporate income tax																											
Working cash net lag days:	-1.04	As per Lead Lag Study as prepared by Navigant for 2015/2016 rates																											
CCA Rate for Class 47 Assets:	8%	100% Class 47 assets																											
Calculation Time Stamp:		23-Jun-19, 10:44 AM																											

Table 41: Network Pool Capital Contribution Calculation: Hydro One Dx ST Customers - 5+ MW Consistent Monthly Peak


Date: 10-Jul-19 Project #: 17503		SUMMARY OF CONTRIBUTION CALCULATIONS Network Pool - Estimated cost																											
Facility Name: Supply to Essex County Transmission Reinforcement Description: Network Pool Capital Contribution Customer: Hydro One Dx ST Customers - 5+ MW Consistent Monthly Peak																													
In-Service		Project year ended - annualized from In-Service Date																											
Date		Jun-30		Jun-30		Jun-30		Jun-30		Jun-30		Jun-30		Jun-30		Jun-30		Jun-30		Jun-30		Jun-30		Jun-30					
Year		2018		2019		2020		2021		2022		2023		2024		2025		2026		2027		2028		2029					
						1st rise-up				2nd rise-up												3rd rise-up							
		0		1		2		3		4		5		6		7		8		9		10							
Revenue & Expense Forecast																													
Load Forecast (MW)		99.5		215.9		260.1		283.9		283.9		283.9		283.9		283.9		284.0		284.0		0.0		0.0		0.0		0.0	
Load adjustments (MW)		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
Tariff Applied (\$/M/Month)		99.5		215.9		260.1		283.9		283.9		283.9		283.9		284.0		284.0		284.0		0.0		0.0		0.0		0.0	
Incremental Revenue - \$k		4,371.2		9,481.9		11,424.5		12,466.7		12,467.8		12,468.9		12,469.9		12,471.0		12,472.1		12,473.2		0.0		0.0		0.0		0.0	
Removal Costs - \$k		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
On-going O&M&A Costs - \$k		0.0		(0.6)		(0.6)		(0.6)		(0.6)		(1.1)		(1.1)		(1.1)		(1.1)		(1.1)		0.0		0.0		0.0		0.0	
Municipal Tax - \$k		0.0		(0.4)		(0.4)		(0.4)		(0.4)		(0.4)		(0.4)		(0.4)		(0.4)		(0.4)		0.0		0.0		0.0		0.0	
Net Revenue/(Costs) before taxes - \$k		0.0		4,370.2		9,480.9		11,423.6		12,465.8		12,467.4		12,468.4		12,469.5		12,470.6		12,471.7		0.0		0.0		0.0		0.0	
Income Taxes - \$k		0.0		(1,157.1)		(2,510.6)		(3,025.5)		(3,301.8)		(3,302.5)		(3,302.9)		(3,303.3)		(3,303.7)		(3,304.0)		0.0		0.0		0.0		0.0	
Operating Cash Flow (after taxes) - \$k		0.0		3,213.1		6,970.3		8,398.0		9,165.6		9,164.8		9,165.5		9,166.2		9,166.9		9,167.6		0.0		0.0		0.0		0.0	
PV Operating Cash Flow (after taxes) - \$k (A)		5.78%		61,648.8		3,124.1		6,407.2		7,298.0		7,528.7		7,118.1		6,729.6		6,362.6		6,015.6		5,687.5		5,377.3		0.0		0.0	
Capital Expenditures - \$k																													
Capital cost before overheads & AFUDC - \$k				(91.8)		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
Overheads - \$k				0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
AFUDC - \$k				0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
Total upfront capital expenditures - \$k				(91.8)		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
On-going capital expenditures - \$k				0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
PV On-going capital expenditures - \$k				0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
Total capital expenditures - \$k				(91.8)		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
PV CCA Residual Tax Shield - \$k				3.7		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
PV Working Capital - \$k				0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
PV Capital (after taxes) - \$k (B)				(88.1)		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
Cumulative PV Cash Flow (after taxes) - \$k (A) + (B)				61,560.7		3,036.0		9,443.2		16,741.3		24,270.0		31,388.1		38,117.7		44,480.3		50,495.9		56,183.4		61,560.7		0.0		0.0	
Discounted Cash Flow Summary																													
Economic Study Horizon - Years:		10																											
Discount Rate - %		5.78%																											
		\$k																											
PV Incremental Revenue		83,870.9																											
PV O&M&A Costs		(5.1)																											
PV Municipal Tax		(2.9)																											
PV Income Taxes		(22,223.4)																											
PV CCA Tax Shield		14.0																											
PV Capital - Upfront		(91.8)																											
Add: PV Capital Contribution		0.0																											
PV Capital - On-going		0.0																											
PV Working Capital		0.0																											
PV Surplus / (Shortfall)		61,560.7																											
Profitability Index*		671.7																											
Notes:		PV of total cash flow, excluding net capital expenditure & on-going capital & proceeds on disposal / PV of net capital expenditure & on-going capital & proceeds on disposal																											
Other Assumptions																													
In-Service Date:		30-Jun-18																											
Municipal Tax:		0.42% Transmission system average																											
Federal Income Tax:		15.00% 2016 federal corporate income tax																											
Ontario Corporation Income Tax:		11.50% 2016 provincial corporate income tax																											
Working cash net lag days:		-1.04 As per Lead Lag Study as prepared by Navigant for 2015/2016 rates																											
CCA Rate for Class 47 Assets:		8% 100% Class 47 assets																											
Notes:																													
Calculation Time Stamp:		10-Jul-19, 9:38 AM																											

Table 42: Network Pool Capital Contribution Calculation: Hydro One Dx ST Customers - 5+ MW Fluctuating Monthly Peak



Date: 10-Jul-19		SUMMARY OF CONTRIBUTION CALCULATIONS																								
Project #: 17503		Network Pool - Estimated cost																								
Facility Name: Supply to Essex County Transmission Reinforcement																										
Description: Network Pool Capital Contribution																										
Customer: ST Customers 5+ MW Fluctuating Monthly Peak																										
In-Service		Project year ended - annualized from In-Service Date																								
Month	Year	Date		2018		2019		2020		2021		2022		2023		2024		2025		2026		2027		2028		
		Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	
		0	1	2	3	4	5	6	7	8	9	10														
Revenue & Expense Forecast																										
Load Forecast (MW)		33.3	72.3	87.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1
Load adjustments (MW)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tariff Applied (\$/M/Month)		33.3	72.3	87.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1
Incremental Revenue - \$k		1,464.0	3,175.7	3,826.4	4,175.4	4,175.4	4,175.8	4,176.1	4,176.5	4,176.9	4,177.2	4,177.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Removal Costs - \$k		0.0																								
On-going O&M&A Costs - \$k		0.0	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.3)	(0.3)	(0.3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Municipal Tax - \$k		0.0	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Revenue/(Costs) before taxes - \$k		0.0	1,463.7	3,175.4	3,826.0	4,175.1	4,175.5	4,175.7	4,176.0	4,176.4	4,176.8	4,177.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Income Taxes - \$k		0.0	(397.4)	(840.6)	(1,013.1)	(1,105.6)	(1,105.8)	(1,105.9)	(1,106.0)	(1,106.2)	(1,106.3)	(1,106.5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Operating Cash Flow (after taxes) - \$k		0.0	1,076.5	2,334.8	2,813.0	3,069.5	3,069.7	3,069.8	3,070.0	3,070.2	3,070.4	3,070.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cumulative PV @ 5.78%			20,649.5																							
PV Operating Cash Flow (after taxes) - \$k (A)			0.0	1,046.5	2,146.2	2,444.5	2,521.8	2,384.2	2,254.1	2,131.1	2,014.9	1,905.0	1,801.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital Expenditures - \$k																										
Capital cost before overheads & AFUDC - \$k			(45.2)																							
- Overheads - \$k			0.0																							
- AFUDC - \$k			0.0																							
Total upfront capital expenditures - \$k			(45.2)																							
On-going capital expenditures - \$k			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV On-going capital expenditures - \$k			0.0																							
Total capital expenditures - \$k			(45.2)																							
PV CCA Residual Tax Shield - \$k			1.8																							
PV Working Capital - \$k			0.0																							
PV Capital (after taxes) - \$k (B)			(43.4)																							
Cumulative PV Cash Flow (after taxes) - \$k (A) + (B)			20,606.1	1,003.1	3,149.3	5,593.8	8,115.6	10,499.8	12,753.0	14,885.0	16,899.9	18,805.0	20,606.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Discounted Cash Flow Summary		Other Assumptions		Notes:	
Economic Study Horizon - Years:	10	In-Service Date:	30-Jun-18		
Discount Rate - %:	5.78%	Municipal Tax:	0.42%	Transmission system average	
		Federal Income Tax:	15.00%	2016 federal corporate income tax	
		Ontario Corporation Income Tax:	11.50%	2016 provincial corporate income tax	
		Working cash net lag days:	-1.04	As per Lead Lag Study as prepared by Navigant for 2015/2016 rates	
		CCA Rate for Class 47 Assets:	8%	100% Class 47 assets	
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PV Incremental Revenue	28,090.5	
PV O&M&A Costs	(1.5)	
PV Municipal Tax	(14.4)	
PV Income Taxes	(7,443.2)	
PV CCA Tax Shield	6.9	
PV Capital - Upfront	(45.2)	
Add: PV Capital Contribution	0.0	(45.2)
PV Capital - On-going	0.0	
PV Working Capital	0.0	
PV Surplus / (Shortfall)	20,606.1	
Profitability Index*	456.8	

Notes:
PV of total cash flow, excluding net capital expenditure & on-going capital & proceeds on disposal / PV of net capital expenditure & on-going capital & proceeds on disposal

Table 43: Network Pool Capital Contribution Calculation: Essex Powerlines

Date: 23-Jun-19		SUMMARY OF CONTRIBUTION CALCULATIONS																										
Project #: 17503		Network Pool - Estimated cost																										
Facility Name: Supply to Essex County Transmission Reinforcement																												
Description: Network Pool Capital Contribution																												
Customer: Essex Powerlines																												
		In-Service																										
Date		Project year ended - annualized from In-Service Date																										
Month		Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30	Jun-30		
Year		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
Revenue & Expense Forecast																												
Load Forecast (MW)		2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	
Load adjustments (MW)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tariff Applied (\$/M/Month)		3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	
Incremental Revenue - \$k		88.0	88.0	85.7	84.7	83.7	82.7	81.8	80.9	80.1	79.2	78.5	77.7	77.0	76.3	75.6	74.9	74.3	73.7	73.1	72.5	71.9	71.3	70.7	70.2	69.6	69.6	
Removal Costs - \$k		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
On-going O&M&A Costs - \$k		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Municipal Tax - \$k		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Net Revenue/(Costs) before taxes - \$k		0.0	88.0	86.8	85.7	84.7	83.7	82.7	81.8	80.9	80.0	79.2	78.5	77.7	77.0	76.3	75.6	74.9	74.3	73.7	73.1	72.5	71.9	71.3	70.7	70.2	69.6	
Income Taxes - \$k		0.0	(23.3)	(23.0)	(22.7)	(22.4)	(22.2)	(21.9)	(21.7)	(21.4)	(21.2)	(21.0)	(20.8)	(20.6)	(20.4)	(20.2)	(20.0)	(19.8)	(19.7)	(19.5)	(19.4)	(19.2)	(19.0)	(18.9)	(18.7)	(18.6)	(18.4)	
Operating Cash Flow (after taxes) - \$k		0.0	64.7	63.8	63.0	62.2	61.5	60.8	60.1	59.5	58.8	58.2	57.7	57.1	56.6	56.1	55.6	55.1	54.6	54.1	53.7	53.3	52.8	52.4	52.0	51.6	51.2	
Cumulative PV @ 5.78%			787.7																									
PV Operating Cash Flow (after taxes) - \$k (A)		0.0	62.9	58.7	54.8	51.1	47.8	44.6	41.7	39.0	36.5	34.2	32.0	29.9	28.0	26.3	24.6	23.1	21.6	20.3	19.0	17.8	16.7	15.7	14.7	13.8	12.9	
Capital Expenditures - \$k																												
Capital cost before overheads & AFUDC - \$k		(1.0)																										
- Overheads - \$k		0.0																										
- AFUDC - \$k		0.0																										
Total upfront capital expenditures - \$k		(1.0)																										
On-going capital expenditures - \$k		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
PV On-going capital expenditures - \$k		0.0																										
Total capital expenditures - \$k		(1.0)																										
PV CCA Residual Tax Shield - \$k		0.0																										
PV Working Capital - \$k		0.0																										
PV Capital (after taxes) - \$k (B)		(1.0)																										
Cumulative PV Cash Flow (after taxes) - \$k (A) + (B)		786.7	(1.0)	61.9	120.6	175.4	226.5	274.3	318.0	360.6	399.7	436.2	470.3	502.3	532.3	560.3	586.6	611.2	634.3	655.9	676.1	695.1	713.0	729.7	745.3	760.0	773.8	786.7

Discounted Cash Flow Summary		Other Assumptions		Notes:	
Economic Study Horizon - Years:	25	In-Service Date:	30-Jun-18		
Discount Rate - %	5.78%	Municipal Tax	0.42%	Transmission system average	
		Federal Income Tax	15.00%	2016 federal corporate income tax	
		Ontario Corporation Income Tax	11.50%	2016 provincial corporate income tax	
		Working cash net lag days	-1.04	As per Lead Lag Study as prepared by Navigant for 2015/2016 rates	
		CCA Rate for Class 47 Assets	8%	100% Class 47 assets	

Notes:	
PV of total cash flow, excluding net capital expenditure & on-going capital & proceeds on disposal / PV of net capital expenditure & on-going capital & proceeds on disposal	

Calculation Time Stamp:	23-Jun-19, 10:31 AM
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Table 44: Network Pool Capital Contribution Calculation: E.L.K.



Date: 23-Jun-19 Project #: 17503		SUMMARY OF CONTRIBUTION CALCULATIONS Network Pool - Estimated cost																											
Facility Name: Supply @ Essex County Transmission Reinforcement Description: Network Pool Capital Contribution Customer: ELK																													
		In-Service																											
		Date																											
		Project year ended - annualized from In-Service Date																											
		Month	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
		Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
Revenue & Expense Forecast																													
Load Forecast (MW)		4.0																											
Load adjustments (MW)		0.0																											
Tariff Applied (\$/M/Month)		3.95																											
Incremental Revenue - \$k		173.9																											
Removal Costs - \$k		0.0																											
On-going O&M&A Costs - \$k		0.0																											
Municipal Tax - \$k		0.0																											
Net Revenue/(Costs) before taxes - \$k		173.9																											
Income Taxes - \$k		0.0																											
Operating Cash Flow (after taxes) - \$k		173.9																											
Cumulative PV @ 5.78%		1,714.9																											
PV Operating Cash Flow (after taxes) - \$k (A)		1,714.9																											
Capital Expenditures - \$k																													
Capital cost before overheads & AFUDC - \$k		(1.7)																											
Overheads - \$k		0.0																											
AFUDC - \$k		0.0																											
Total upfront capital expenditures - \$k		(1.7)																											
On-going capital expenditures - \$k		0.0																											
PV On-going capital expenditures - \$k		0.0																											
Total capital expenditures - \$k		(1.7)																											
PV CCA Residual Tax Shield - \$k		0.0																											
PV Working Capital - \$k		0.0																											
PV Capital (after taxes) - \$k (B)		(1.7)																											
Cumulative PV Cash Flow (after taxes) - \$k (A) + (B)		1,714.9																											

Discounted Cash Flow Summary

Economic Study Horizon - Years: 25
Discount Rate - %: 5.78%

\$k

PV Incremental Revenue: 2,335.2
PV O&M&A Costs: (0.0)
PV Municipal Tax: (0.1)
PV Income Taxes: (618.8)
PV CCA Tax Shield: 0.3
PV Capital - Upfront: (1.7)
Add: PV Capital Contribution: 0.0 (1.7)
PV Capital - On-going: 0.0
PV Working Capital: 0.0
PV Surplus / (Shortfall): **1,714.9**

Profitability Index*: **1,009.4**

Notes:
PV of total cash flow, excluding net capital expenditure & on-going capital & proceeds on disposal / PV of net capital expenditure & on-going capital & proceeds on disposal

Other Assumptions

In-Service Date: 30-Jun-18
Municipal Tax: 0.42% Transmission system average
Federal Income Tax: 15.00% 2016 federal corporate income tax
Ontario Corporation Income Tax: 11.50% 2016 provincial corporate income tax
Working cash net lag days: -1.04 As per Lead Lag Study as prepared by Navigant for 2015/2016 rates
CCA Rate for Class 47 Assets: 8% 100% Class 47 assets

Notes:
Calculation Time Stamp: 23-Jun-19, 10:19 AM

Table 45: Network Pool Capital Contribution Calculation: Entegrus



Date: 23-Jun-19 Project #: 17503		SUMMARY OF CONTRIBUTION CALCULATIONS Line Pool - Estimated cost																									
Facility Name: Supply to Essex County Transmission Reinforcement																											
Description: Network Pool Capital Contribution																											
Customer: Entegrus																											
	In-Service Date Jun-30 2018	Project year ended - annualized from In-Service Date																									
		Jun-30 2019	Jun-30 2020	Jun-30 2021	Jun-30 2022	Jun-30 2023	Jun-30 2024	Jun-30 2025	Jun-30 2026	Jun-30 2027	Jun-30 2028	Jun-30 2029	Jun-30 2030	Jun-30 2031	Jun-30 2032	Jun-30 2033	Jun-30 2034	Jun-30 2035	Jun-30 2036	Jun-30 2037	Jun-30 2038	Jun-30 2039	Jun-30 2040	Jun-30 2041	Jun-30 2042	Jun-30 2043	
Revenue & Expense Forecast																											
Load Forecast (MW)		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Load adjustments (MW)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tariff Applied (\$/kW/Month)		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Incremental Revenue - \$k		0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Removal Costs - \$k		0.0																									
On-going O&M&A Costs - \$k		0.0	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Municipal Tax - \$k		0.0	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Net Revenue/(Costs) before taxes - \$k		0.0	3.5	3.0	3.2	3.3	3.5	3.7	3.8	4.0	4.1	4.3	4.4	4.6	4.8	4.9	5.1	5.3	5.4	5.6	5.8	6.0	6.1	6.3	6.5	6.7	6.9
Income Taxes - \$k		0.0	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)	(1.0)	(1.0)	(1.0)	(1.1)	(1.1)	(1.2)	(1.2)	(1.3)	(1.3)	(1.4)	(1.4)	(1.5)	(1.5)	(1.6)	(1.6)	(1.7)	(1.7)	(1.8)	(1.8)
Operating Cash Flow (after taxes) - \$k		0.0	2.6	2.6	2.2	2.3	2.5	2.6	2.7	2.8	2.9	3.0	3.2	3.4	3.5	3.6	3.8	3.9	4.0	4.1	4.2	4.4	4.5	4.6	4.8	4.9	5.1
PV Operating Cash Flow (after taxes) - \$k (A)	Cumulative PV @ 5.78%	0.0	2.5	2.3	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.7	1.7	1.7	1.6	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.2	1.2
Capital Expenditures - \$k																											
Capital cost before overheads & AFUDC - \$k		(0.3)																									
- Overheads - \$k		0.0																									
- AFUDC - \$k		0.0																									
Total upfront capital expenditures - \$k		(0.3)																									
On-going capital expenditures - \$k		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV On-going capital expenditures - \$k		0.0																									
Total capital expenditures - \$k		(0.3)																									
PV CCA Residual Tax Shield - \$k		0.0																									
PV Working Capital - \$k		0.0																									
PV Capital (after taxes) - \$k (B)		(0.3)																									
Cumulative PV Cash Flow (after taxes) - \$k (A) + (B)		42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0

Discounted Cash Flow Summary		Other Assumptions		Notes:	
Economic Study Horizon - Years:	25	In-Service Date:	30-Jun-18		
Discount Rate - %:	5.78%	Municipal Tax:	0.42%	Transmission system average	
		Federal Income Tax:	15.00%	2016 federal corporate income tax	
		Ontario Corporation Income Tax:	11.50%	2016 provincial corporate income tax	
		Working cash net lag days:	-1.04	As per Lead Lag Study as prepared by Navigant for 2015/2016 rates	
		CCA Rate for Class 47 Assets:	8%	100% Class 47 assets	
PV Incremental Revenue	57.4				
PV O&M&A Costs	(0.0)				
PV Municipal Tax	(0.0)				
PV Income Taxes	(15.2)				
PV CCA Tax Shield	0.0				
PV Capital - Upfront	(0.3)				
Add: PV Capital Contribution	0.0				
PV Capital - On-going	0.0				
PV Working Capital	0.0				
PV Surplus / (Shortfall)	42.0				
Profitability Index*	151.2				
Notes: PV of total cash flow, excluding net capital expenditure & on-going capital & proceeds on disposal / PV of net capital expenditure & on-going capital & proceeds on disposal					
Calculation Time Stamp: 23-Jun-19, 10:09 AM					

APPENDIX 2

**TRANSMISSION SYSTEM CODE, SECTIONS 6.5.3- 6.5.11:
ECONOMIC EVALUATION TRUE-UP CALCULATIONS
FOR LOAD CUSTOMERS**

- (j) establish that the relevant connection rate revenues shall be the revenue derived from that part of the load customer's new load that exceeds the total normal supply capacity of any connection facility already serving that customer and which will be served by a new or modified connection facility;
- (k) require that the customer provide its load shape in such form and detail as the transmitter may reasonably require; and
- (l) provide for separate economic evaluations for transformation connection facilities and line connection facilities.

The economic evaluation procedure may permit an initial calculation of a customer's capital contribution based on estimated costs, provided that where this occurs the transmitter must subsequently recalculate the customer's capital contribution in accordance with paragraph (c) based on actual costs as soon as these are known, and obtain from or credit the customer for any difference between the two calculations. Such recalculated capital contribution shall thereafter be used as the customer's capital contribution for all purposes under this Code.

Economic evaluation true-up calculations for load customers

- 6.5.3 For new or modified connection facilities, a transmitter shall carry out a true-up calculation, based on actual customer load, at the following true-up points:
- (a) for high risk connections, at the end of each year of operation, for five years;
 - (b) for medium-high risk and medium-low risk connections, at the end of each of the third, fifth and tenth year of operation; and
 - (c) for low risk connections, at the end of each of the fifth and tenth year of operation, and at the end of the fifteenth year of operation if actual load is 20 percent higher or lower than the initial load forecast at the end of the tenth year of operation.
- 6.5.4 Subject to sections 6.5.8, 6.5.9 and 6.5.10, for the true-up calculation, a transmitter shall use the same methodology used to carry out the initial economic evaluation, and the same inputs except for load, which will be based on the actual load up to the true-up point and an updated load forecast for the remainder of the economic evaluation period used.

- 6.5.5 Subject to sections 6.5.8, 6.5.9 and 6.5.10, before carrying out a true-up calculation for a load customer who did not make an initial capital contribution, a transmitter shall adjust the initial load forecast used in the initial economic evaluation to the point where the present value of connection rate revenues equals the present value of costs.
- 6.5.6 Where a true-up calculation shows that a load customer's actual load and updated load forecast is lower than the load in the initial load forecast, and does not generate the initial forecast connection rate revenues, a transmitter shall require the load customer to make a payment to make up the shortfall, adjusted appropriately to reflect the time value of money.
- 6.5.7 Where a true-up calculation shows that a load customer's actual load and updated load forecast is higher than the load in the initial load forecast, and generates more than the initial forecast connection rate revenues, the transmitter shall post the excess revenue as a credit to the customer in a notional account. The transmitter shall apply this credit against any shortfall in subsequent true-up calculations. The transmitter shall rebate to the load customer any credit balance that remains when the last true-up calculation is carried out, adjusted appropriately to reflect the time value of money. The rebate shall not exceed any capital contribution, adjusted to reflect the time value of money, previously paid by the load customer.
- 6.5.8 When carrying out a true-up calculation for a distributor, a transmitter:
- (a) shall add to the actual load the amount of any embedded generation (determined in accordance with section 11.1) that was installed during the true-up period; and
 - (b) shall not reduce the updated load forecast as a result of any embedded generation (determined in accordance with section 11.1) that was installed during the true-up period.

- 6.5.9 When carrying out a true-up calculation for a load customer other than a distributor, a transmitter:
- (a) shall add to the actual load the amount of any embedded generation (determined in accordance with section 11.1) of 1 MW or less per unit, or any embedded renewable generation of 2 MW or less per unit, that was installed during the true-up period; and
 - (b) shall not reduce the updated load forecast as a result of any embedded generation (determined in accordance with section 11.1) of 1MW or less per unit, or any embedded renewable generation of 2 MW or less per unit, that was installed during the true-up period.
- 6.5.10 When carrying out a true-up calculation for any load customer, a transmitter:
- (a) shall add to the actual load the amount of any reduction in the customer's load that the customer has demonstrated to the reasonable satisfaction of the transmitter (such as by means of an energy study or audit) has resulted from energy conservation, energy efficiency, load management or renewable energy activities that occurred during the true-up period; and
 - (b) shall not reduce the updated load forecast as a result of any reduction in the customer's load that the customer has demonstrated to the reasonable satisfaction of the transmitter (such as by means of an energy study or audit) has resulted from energy conservation, energy efficiency, load management or renewable energy activities that occurred during the true-up period.
- 6.5.11 Where a load customer voluntarily and permanently disconnects its facilities from a transmitter's facilities prior to the last true-up point referred to in section 6.5.3, the transmitter shall at the time of disconnection carry out a final true-up calculation in accordance with the rules set out in sections 6.5.4, 6.5.5, 6.5.8 and 6.5.9. Where the true-up calculation shows that the load customer's load to the date of disconnection has not generated the initial forecast connection rate revenues, the transmitter shall require the load customer to make a payment to make up the shortfall, adjusted appropriately to reflect the time value of money. Where a true-up calculation shows that the load customer's load to the date of disconnection has generated more than the initial forecast connection rate revenues, the transmitter shall rebate to the load customer any excess, adjusted appropriately to reflect the time

value of money. The rebate shall not exceed any capital contribution, adjusted to reflect the time value of money, previously paid by the load customer.

6.6 CONTESTABILITY

6.6.1 Where a load customer requires new connection facilities, a transmitter shall allow the load customer to elect either to provide its own connection facilities or to require the transmitter to provide them. Where the load customer elects to require the transmitter to provide the connection facilities, the transmitter shall also allow the load customer to elect to have any associated contestable construction or design work (as identified in the transmitter's contestability procedure referred to in section 6.6.2) carried out by a party other than the transmitter.

6.6.2 A transmitter shall establish in its connection procedures referred to in section 6.1.4 and implement a contestability procedure. The contestability procedure shall establish:

- (a) what work can be done by the transmitter only, on its own existing facilities, including conceptual design (uncontestable work), and what other connection facility construction and design work may, at a load customer's option, be done by either the transmitter or the load customer (contestable work), provided that if the load customer intends or is required to transfer any connection facilities that it constructs to the transmitter, design work required to establish the transmitter's technical requirements and specifications in relation to a given connection project shall be uncontestable;
- (b) the obligation of the transmitter to provide, at no cost:
 - i. a description of the contestable work and uncontestable work;
 - ii. a description of the labour and materials for each of the contestable work and the uncontestable work;
 - iii. an initial estimate of the capital cost for each of the contestable work and the uncontestable work, broken down into labour (including design, engineering and construction), materials, equipment, direct overhead (including administration) and